Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

December 17, 1956

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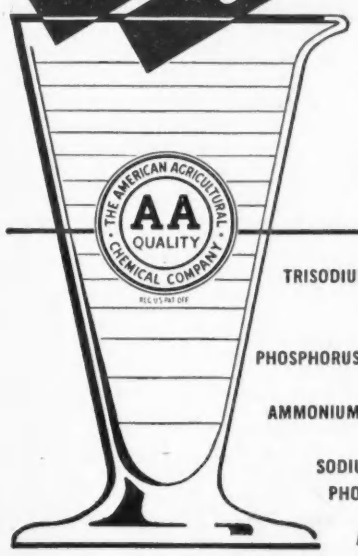

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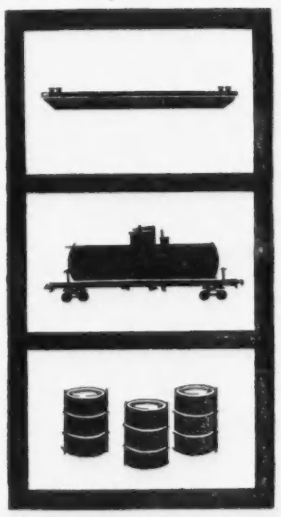

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Wonderland. A trip around Roche Park is like a visit to fantasy land. The chemical manufacturing area is characterized by giant vats, 4-story distillation columns, myriads of piping, a model "tank farm" for solvent storage. Some of the buildings pictured are centers for chemical research, pharmacological and medical research, toxicology, applied nutrition, pharmaceutical manufacture and administration.

Experience. In the fields of medicine and nutrition the trade mark 'Roche' symbolizes tops in quality, experience and integrity. Some 2000 employees work here in this 104-acre area, much of which is still in woodland and gardens.

"By the Tons." The Roche Vitamin Division supplies large quantities, some in ton lots, of most of the important vitamins to other pharmaceutical manufacturers who convert them into dosage forms. In addition, it has become a headquarters for the pure vitamins required by the food industries—A for margarine, B_1, B_2, and Niacin for cereal enrichment, C for the standardization of fruit juices as well as an important antioxidant for use with cured meats, frozen fruits and beverages.

Leadership. Several vitamins were first synthesized by Roche scientists. Most recent of these has provided pure beta carotene for safe coloring of margarine, shortening, and other food products. The company is a leader in commercial scale application of these processes for the benefit of mankind.

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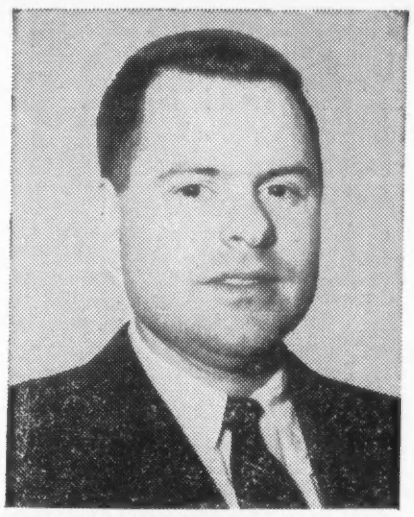

OPERATIONS VICE-PRESIDENT: H. W. Strong, jr., appointed vice-president in charge of operations of Colton Chemical Company, a division of Air Reduction Company, Cleveland, Ohio.

Cyanamid Sets Up Farm, Home Division

A new division of American Cyanamid Company, New York, which will integrate much of the company's agricultural product development and sales goes into operation January 1, and will be known as the farm and home division. The division was formed by the transfer of veterinary product sales from the Lederle Laboratories Division, the transfer of the animal feed and food industry departments from the fine chemicals division, and the inclusion of some agricultural chemical products.

The farm and home division, said K. C. Towe, president, emerges as a step in the continuing program for implementation and modification of Cyanamid's organizational setup, and combines the product development and marketing facilities of various departments now engaged in agriculture.

"Our ultimate aim," Mr. Towe said, "is to shape one highly efficient unit which will be able to produce new and better products more economically and at a faster rate."

A. B. Clow, formerly general manager of the fine chemicals division, will head the new farm and home division.

Mr. Towe also announced that the agricultural chemicals division has been re-

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Alcohol-Butadiene Plant Leasing Plans Abandoned

The government last week abandoned its efforts to lease its alcohol-butadiene plant at Louisville, Ky., on a long term basis, and announced that it would ask congress in January to approve legislation permitting sale of the plant.

Negotiations have been under way since November 1 with Publicker Industries, Inc., Philadelphia, and Union Carbide & Carbon Corporation, New York, to lease the plant for a period of five to fifteen years.

Laurence B. Robbins, administrator of the Federal Facilities Corporation, stated that the final lease offers of both concerns are unacceptable, and the negotiations have been terminated. The corporation, he added, will recommend that congress give it due authority to sell the plant.

Details of the legislative recommendations were not disclosed by Mr. Robbins, but the agency is expected to ask for authority to sell the plant for general chemical use. Such a proposal was made to congress last session, but turned down at that time by the house armed services committee. The plant currently is under a lease to Publicker until April, 1958.

MCA Asks More Publicity On Dumping Probes, Clearer Set of Measuring Standards

The Manufacturing Chemists Association wants more publicity on investigations of dumping and also wants the antidumping act amended to set more precise standards for determining the facts of dumping and injury. Those were the main points of a statement filed last week with Customs Commissioner Ralph Kelly, who is studying the operations and effectiveness of the antidumping law with a view to recommending changes that would give better enforcement of the act.

Existing procedures for investigations of suspected dumping are believed by MCA to be seriously deficient in respect to informing the public of the pendency of such investigations.

Producers in the Dark

The present procedure provides no assured way for the domestic producer to even know of the existence of an investigation. It is possible that an investigation could be concluded and a finding of no-dumping be made without the domestic producer even being aware of it.

By contrast, the importer and foreign exporter are certain to learn of the investigation in its early stages.

MCA recommended to the commissioner that public notice of the institution of an investigation of suspected dumping be made as soon as the Customs Bureau considers the information at hand reasonably sufficient to indicate a suspicion of dumping; that public notice be made of tentative findings of fact of dumping or no dumping with specific right given to interested parties to submit comments on the findings; and that public notice of a final determination of dumping or no-dumping be made with detailed findings of fact supporting the action.

The recommended changes in the law to provide a more precise definition of the standards or criteria for determining the facts of dumping and injury, were briefed as follows:

- Fair value, one of the two factors determinative of the fact of dumping, should be made definitely synonymous with foreign market value. Logically, the same price differential which constitutes the measure of the antidumping duty should also be determinative of the fact of dumping.

Therefore, if such a price differential exists then the finding of dumping should be made mandatory. Existing customs regulations permit the customs authorities the privilege of using this measure, but

—Continued on page 52

Shell Chemical to Raise Isopropyl Alcohol Output

Shell Chemical Corporation, New York, is undertaking a two-stage expansion program which will increase its production of isopropyl alcohol by 120 million pounds per year.

The first stage, amounting to approximately 70 million pounds per year, is slated to be completed in 1957 and the second stage in 1958.

The expansion will include new facilities at three of the company's plants at Houston, Tex., Norco, La., and Dominguez, Calif.

DIAMOND RESEARCH HEAD: Thornton F. Holder, named director of research for Diamond Alkali Company, Cleveland, Ohio, succeeding Dr. Albert W. Meyer who has resigned.

Niacin Production Is Begun by Cowles

R. F. Huntley, president of Cowles Chemical Company, Cleveland, Ohio, has announced that his company is now in large scale production of niacin, USP. Mr. Huntley stated that Cowles is producing niacin by a unique process involving catalytic air oxidation.

Cowles is also offering a feed grade niacin for use in compounding animal feed supplements.

Niacin is the first of a series of organic acids and related compounds to be produced in the newly-completed organic synthesis plant located at Skaneateles Falls. Cowles also operates three other chemical plants primarily for the production of inorganic chemicals. They are located at Skaneateles Falls and Lockport, N. Y., and Sewaren, N. J.

Sales of Cowles niacin and other organic chemicals are being directed by Frank F. Black, manager of the organic chemical department, whose office is in Cleveland.

Hagan Corp. Changes Name

Hagan Corporation, Pittsburgh, Pa., will change its name to Hagen Chemicals & Controls, Inc., effective January 1. At the same time its subsidiaries, Calgon, Inc., Hall Laboratories, Inc., and Buromin Company will be merged into the parent company. Calgon and Hall will continue as divisions.

Allied Chemical, Kennecott Copper In Titanium Pact

Allied Chemical & Dye Corporation and Kennecott Corporation, both of New York, have announced a decision to form a new company to produce and sell titanium metal. Charles R. Cox, president of Kennecott, and Fred J. Emmerich, president of Allied Chemical, indicated that plans for the new company call for an initial investment of $40 million and further expansion as industry demands develop.

They stated that the new company would be equally owned by the parent corporations. A plant will be constructed at a site to be announced shortly. Production of titanium tetrachloride, titanium sponge and titanium billets is expected to start late in 1958.

Solvay Method to Be Used

The new venture will make it possible to utilize the complementary technological resources and experience of the parent companies in chemical processing and metal fabricating. A new continuous process developed by Allied Chemical's Solvay Process Division will be employed, in which sodium is used to reduce titanium tetrachloride to titanium sponge.

Allied Chemical has also developed an improved process for the manufacture of titanium tetrachloride, which permits the use of titanium slag as the raw material.

Kennecott's subsidiary, Chase Brass & Copper Company, has developed processes for melting and fabricating titanium and these will be employed in the new operation. The new company is expected to undertake further pilot plant work and market development of an iodide process for the production of titanium with special properties.

The new corporation will be separate from Quebec Iron & Titanium Corporation, which is partly owned by Kennecott and which mines and processes iron-titanium ore to produce pig iron and titanium slag. The slag is one of the starting materials for titanium pigment and titanium metal.

Titanium, because of its high strength-to-weight ratio at temperatures up to 800 degrees Fahrenheit, is an important metal for commercial airplanes. In aircraft of the future, as much as 75 percent of air frame weight may be fabricated from titanium. The metal is also expected to play an important role in military aircraft and in the long-range guided missile program, it was pointed out.

Titanium has great potential for general commercial use. Its lightness, strength and high resistance to all types of corrosion have given it a rapidly expanding market.

Gov't Suit Filed Against Youngstown and Bethlehem

Department of Justice last week filed suit in the United States District Court in the southern district of New York to enjoin the acquisition by Bethlehem Steel Corporation of the properties and assets of Youngstown Sheet & Tube Company.

Filing of the civil antitrust complaint, under section 7 of the Clayton act, followed by one day an announcement by the companies that they had signed a merger agreement.

The complaint alleged that the merger would substantially lessen competition in the production and sale of a variety of products of the iron and steel industry, including cokeoven byproducts, oil well drilling equipment and production machinery.

Chemical Unit Planned By H. K. Porter Co.

H. K. Porter Company, New York, plans to build a chemical plant in Pascagoula, Miss., to produce magnesia and basic refractory products. The cost of the plant is estimated by T. M. Evans, Porter's president, at $8 million, and completion is scheduled for early 1958.

The location was chosen because of the ready availability of raw materials, natural gas, and rail and water transportation which will permit economical shipment to the principal markets in Birmingham, Ala., Chicago and Pittsburgh, Pa.

Nitrogen Cutback Called Necessary to Avoid Pile-Up

If a pile-up of stocks is to be avoided at mid-1958, world nitrogen production will have to be cut back sharply in the next two years. So say Aikman [London], Ltd., English brokerage house, in its annual report on the international nitrogen situation.

It bases its prediction of an unwieldly surplus on present nitrogen expansion plans. If there is no change in these projects, Aikman points out, some 10¼ million metric tons of nitrogen capacity will be in place during 1957-58.

Backing up this forecast, the British concern notes that world production as of June 30 of this year was 8,175,000 metric tons, as against a consumption figure of 7,595,000 tons. Output for the past fertilizer year was thus about 10 percent above 1954-55, while consumption was up about 6 percent.

"There is a large increase in stocks in the United States," Aikman reports, "but in Europe they appear to be quite manageable."

For 1956-57, it estimates world nitrogen capacity at 9,160,000 metric tons, and puts consumption at 7,990,000 tons. However, it says that the fuel shortage brought on by the Suez crisis might well cut more heavily into European production than anticipated. The scarcity of shipping may also take a big bite out of consumption, as a major portion of European nitrogen output must be exported.

"Under any circumstances," Aikman observes, "it is clear that stocks at June 30, 1957, will be much higher than at June 30, 1956, unless production is radically reduced in the United States as compared with present estimates."

Commenting on the 1955-56 consumption figure, Aikman indicates that nitrogen demand for agricultural purposes

—Continued on page 52

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Nickel Policy of Government Is Blasted by Senate Committee

The senate small business committee last week blasted the government—and the Department of Commerce in particular—for its handling of the nickel supply problem and for forcing the small industry consumers of the metal to bear the brunt of the shortage. The unanimous report of the committee charged that the government had evaded its responsibility towards small users.

IN BUYING POST: G. C. Bradshaw, director of sales research for Mallinckrodt Chemical Works, St. Louis, Mo., who has been made acting general purchasing agent for the company.

The committee's report was the result of an extensive investigation into the nickel shortage, which brought on demands in congress last session that an allocation system be set up to assure more equity in the distribution of supplies. The report charged that the present defense rating system in use for defense contractors was being abused and recommended that the Department of Justice undertake legal action.

Findings Are Noted

Among the committee's findings and recommendations were the following:

- Contrary to claims of primary producers and Department of Commerce officials, the electroplating industry has not been receiving an equitable share of the supply of non-defense nickel. During the shortage, small job shops were the first to have their supply cut and the last to have cuts restored.
- In any situation in which the government preempts 40 percent of the total supply of metal, it has a firm responsibility to assure that the resultant hardships are borne equally by all non-defense users. This responsibility was not met during the 1951-53 period of government allocation control.
- Available data as to the structure of the nickel-consuming industry and the distribution of nondefense nickel are woefully inadequate. The congress should give consideration to empowering the Small Business Administration to develop data which would provide a dependable yardstick to assure the equitable treatment of small-business men engaged in the nickel industry.
- The Office of Defense Mobilization should take "aggressive action" to develop new sources of supply of nickel and

—Continued on page 74

Sulfuric Acid Unit Opened for Storage

Bulk storage capacity for more than 1,500 tons of 66 degree Baume sulfuric acid has been completed for Monsanto Chemical Company at New Haven Terminal, Inc., New Haven, Conn. Sulfuric acid is produced by Monsanto at its Everett, Mass., plant and shipped by barge to the New Haven facility, where it can be transhipped by tank truck.

Also a part of the facility are the necessary piping and pumping facilities for unloading from the barge and for loading tank trucks for shipment within the New York and New Haven areas.

The completion of the New Haven facility makes possible more efficient usage of the barge which the company has had in operation between New Haven and Everett, Monsanto reported. The barge has been used to haul the raw material, liquid sulfur, to the Massachusetts location for conversion into acid.

The sulfur is brought by tanker from Louisiana and transferred to the barge at the New Haven Terminal facilities. This unique manner of shipping raw material sulfur in liquid form was inaugurated by Monsanto more than a year ago.

Over-Counter Drug Bill Given to N. J. Legislature

A substitute bill to give the New Jersey State Board of Pharmacy the power to license general stores as well as pharmacies to sell patent medicines was voted out of the state senate public health committee last week.

The so-called "aspirin bill" which general storekeepers have been pushing to permit them to sell bromides, pills and other packaged medicines, was released from committee in a revised form. It would give the pharmacy board police powers over the sale of packaged medicines anywhere.

Grove Buys Coast Firm

Grove Laboratories, Inc., St. Louis, Mo., has purchased Harrison Products, Inc., San Francisco, makers of the proprietary caffeine product, "NoDoz Awakeners."

The Week's Price Changes

African Manganese Dioxide, USP Sodium Hydroxide Increase. Cobalt Metal, Argentine Casein and Peanut Oil Decline.

Prices Advanced

Manganese dioxide, African, $39.50 per ton (p. 38).
Molasses, New Orleans, ½c. per gal. (p. 46).
Oil, celeryseed, 50c. per lb. (p. 60).
Citronella, Ceylon, 4c. per lb. (p. 60).
Clove, bud, 20c. per lb. (p. 60).
Cod, ⅛c. per lb. (p. 67).
Corn, crude, ⅛c. per lb. (p. 67).
refd., ⅛c. per lb.
Geranium, Bourbon, 25c. per lb. (p. 60).
Ginger, 50c. per lb. (p. 60).
Lavender, spike, 55c. per lb. (p. 60).
Olive, 10c. per gal. (p. 67).
Palm, ¼c. per lb. (p. 67).
Rapeseed, ¼c. per lb. (p. 67).
Oleo stearine, ½c. per lb. (p. 67).
Sodium hydroxide, USP, 5c. per lb. (p. 55).
Potassium hydroxide, USP, 5c. per lb. (p. 55).

Prices Reduced

Casein, imp., Arg., ½c. per lb. (p. 62).
Cobalt metal, 25c. per lb. (p. 38).
Greases, ⅛c. per lb. (p. 67).
Linseed meal, exp., $1 per ton (p. 67).
Oil, bois de rose, 20c. per lb. (p. 60).
Cottonseed, crude, ⅛c. per lb. (p. 67).
refd., ⅛c. per lb.
Peanut, crude, ½c. per lb. (p. 67).
refd., ½c. per lb.
Tung, ¼c. per lb. (p. 67).
Potassium stannate, 1.5c. per lb. (p. 38).
Sodium stannate, 1.8c. per lb. (p. 38).
Stannic chloride, 1.8c. per lb. (p. 38).
Stannous chloride, anhyd., 2.4c. per lb. (p. 38).
hydrous, cryst., 2c. per lb.
Sulfate, 2.3c. per lb.
Tin, 4⅜c. per lb. (p. 38).
Tallow, ined., ⅛c. per lb. (p. 67).
Tankage, New York, 25c. per unit-ton (p. 43).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100=1949 average)

Dec. 14, 1956	Dec. 7, 1956	Dec. 16, 1955
109.62	109.56	107.14

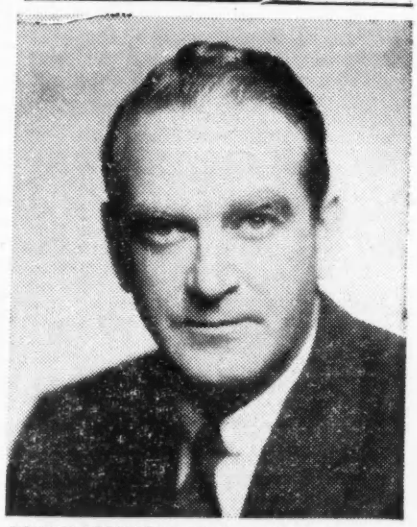
Shell Completes Resin Units

Shell Chemical Corporation, New York, has completed two new "Epon" resin units at its Houston, Tex., plant, making it possible to triple its production of the resins. One of the units will produce liquid grades of the resin and the other solid grades. C. W. Humphreys, the company's manufacturing vice-president, said the unit to produce liquid grades will go into production early this month. The second unit is now in production. Previously the liquid resins were produced alternately with solid grades in other units at the Houston plant.

Liquid resins are manufactured into three different end-forms, for use chiefly by the automobile and aircraft industries. These industries use them as structural plastics (metal forming tools and dies, glass laminated parts, body patches), as corrosion resistant paints and as metal-to-metal adhesives. The liquid resins also are made into corrosion resistant pipes and tanks and into electrical insulation.

Solid grades of "Epon" resin are used primarily in the surface coating industry. Mr. Humphreys said the new unit has boosted the plant's production of solid grades two and one-half times and multiplied the batch size ten-fold.

Mr. Humphreys explained that the new facilities are designed to produce resin with improved clarity, color, batch-to-batch uniformity and performance.



WYETH PRESIDENT: Herbert W. Blades, elected president and chief executive office of Wyeth Laboratories, division of American Home Products Corporation, Philadelphia, succeeding Harry S. Howard who has become chairman.

Di (2-Ethylhexyl) Amine Costs Less as Output Rises

Di(2-ethylhexyl) amine is now available in tank car quantities at a new low price of 75 cents a pound, according to the Carbide & Carbon Chemicals Company, New York, a division of Union Carbide & Carbon Corporation.

The product was previously available only in developmental quantities at $1 a pound. The increased availability and reduced price are said to be direct results of the expanding market.

Schering Elects Vice-Pres.

Mortimer J. Fox, jr., treasurer of Schering Corporation, Bloomfield, N. J., since 1950, has been elected to the newly-created position of vice-president and treasurer.

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Carbide Forms New Unit

Union Carbide & Carbon Corporation, New York, has formed a unit to engage in basic scientific research, which will be known as Union Carbide Research Institute and will be located near Tarrytown, N. Y.

The institute will be under the administration of Dr. Augustus Kinzel, research vice-president for Union Carbide. Dr. E. R. Jette, formerly head of the chemistry and metallurgy division at Los Alamos Scientific Laboratory, New Mexico, has been appointed the director of the institute.

The assistants will be Dr. S. R. Aspinall, formerly with the Office of Naval Research, and Dr. A. J. Stosick, formerly division chief of the rockets and material division of the jet propulsion laboratories at the California Institute of Technology.

A major purpose of the new research institute will be to contribute to the store of fundamental knowledge by studying the physical and chemical behavior of matter under ordinary as well as extreme conditions of pressure and temperature.

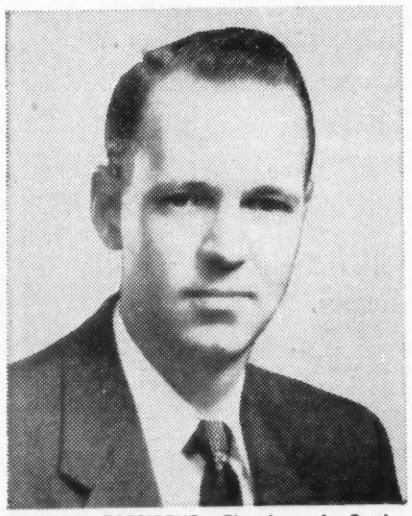
This work at the institute will complement and extend the basic research now being carried on in the existing research laboratories of Union Carbide.

It is expected that the facilities for the institute will be completed by the spring of 1958. Plans for the building to house the institute were prepared by the architectural firm of Skidmore, Owings & Merrill.

Its floor plan has been designed to allow for a high degree of flexibility. There will be forty laboratory modules separated by movable partitions so that these units may be grouped to meet changing space requirements for research projects. In addition, the institute will have its own scientific library and office space to accommodate the staff. The building will be completely air-conditioned.

Shulton, Inc., Develops Process For Manufacturing New Synergist

The fine chemicals division of Shulton, Inc., Clifton, N. J., has developed a process for manufacturing "Sesoxane," described by the company as a new and superior synergist for pyrethrins and related insecticides. According to Richard E. Brainard, vice-president of the corporation and general manager of the fine chemicals division, the material is now being manufactured by the company in pilot plant quantities. Shulton feels that "Sesoxane"-pyrethrin formulations will be of interest to formulators and packages of insecticides where a safer product is required for use on grain, fruits and in household and animal sprays.



HOUDRY PRESIDENT: Theodore A Burtis, elected president and chairman of Houdry Process Corporation, Philadelphia, succeeding C. G. Kirkbride who has joined Sun Oil Company.

Discovered by USDA Researcher

"Sesoxane" was discovered by Dr. Morton Beroza of the Department of Agriculture in Beltsville, Md., and reported by him as the 2-(2-ethoxyethoxy) ethyl 3,4-methylenedioxyphenyl acetal of acetaldehyde. The material is called "Sesoxane" by Shulton, who adopted for it the chemical name 2-(3,4-methylenedi oxyphenoxy)-3,6,9-trioxaundecane.

According to Shulton, tests have shown "Sesoxane" to be superior in synergistic activity to other commercial pyrethrin synergists and, because of its effectiveness, it is expected to cost less to use than other available synergist formulations for equal knockdown and kill.

High kill can be obtained without the use of DDT or other toxic insecticides.

Numerous tests have already been published by the USDA showing the effective-

—*Continued on page 52*

Solvay Is Testing Georgia Alkali Plant

The new Brunswick, Ga., chlorine-caustic soda plant of Solvay Process Division of Allied Chemical & Dye Corporation, New York, is now undergoing preliminary testing of equipment. The testing is expected to be completed within the next few weeks and full commercial production is scheduled to start January 1.

The new installation represents the first step in Solvay's two part construction

—*Continued on page 74*

Pan American Sulfur Yield In Mexico Hits Millionth Ton

The millionth ton of sulfur has come from the Jaltipan Dome in Veracruz, Mexico, according to an announcement from Pan American Sulphur Company, Dallas, Tex., and its subsidiary, Azufrera Panamericana, S.A.

The company, in opening a new industry in Mexico, has reportedly grown, in less than two years of operation, to be the third largest Frasch sulfur producing company in the world.

In 1956, Pan American's first complete year of production and shipping, the company will produce more than 600,000 tons of sulfur. Current production is at the rate of 2,000 tons per day, with the plant's expansion program now completed.

The new sulfur company, reported to be

—*Continued on page 74*

Drug Makers Are Cautioned To Reconsider Expansion Plans As Recession Is on Horizon

The drug industry, which this year will spend 39 percent more on expansion than in 1955, was cautioned last week to reconsider new plant and manufacturing programs, "particularly where they require outside financing." The warning came from August Ihlefeld, president of Savings Banks Trust Company, New York, who termed the present situation "one of a business capital spending boom and a severe credit squeeze." He felt that "a cutback in business outlays for plant and equipment will follow sooner or later" and that "the prospect of a business recession must be envisioned in the financial scene of tomorrow."

Mr. Ihlefeld took this dim view of the economic outlook in an address before the midyear meeting of the American Pharmaceutical Manufacturers' Association in New York last week.

Drugs and General Economy

He conceded that the pharmaceutical industry is less affected by fluctuations in the general economy than most other industries. Competition among drug makers and product developments by individual firms often are more important in shaping the pharmaceutical sales picture, he added.

"At the same time," Mr. Ihlefeld told the drug manufacturers, "it is well to remember that it is easier to expand sales and secure remunerative prices for your products when employment and personal incomes are high, and when people are not seeking to economize in their personal spending.

"Hence, should the current boom, sparked as it is by business plant and equipment spending, be followed after six months or a year by a recession caused by reduced expenditures upon plant or for home building, the pharmaceutical industry could be affected adversely."

In the pharmaceutical industry, he noted that much of the outlay for future expansion goes into research and product development. "In a period of high income taxation," the banker commented, "this is a great advantage."

Mr. Ihlefeld was of the opinion that "well planned and efficiently conducted research programs pay off very hand-

—*Continued on page 40*

Pennsalt Division Set Up; General Manager Appointed

Pennsylvania Salt Manufacturing Company, Philadelphia, has announced the consolidation of two units—its Sharples operation and the industrial chemicals division.

The new unit, known as the industrial division, will be directed by general manager Hugh C. Land.

Included in the fully integrated operations of the new division are plants at Natrona, Pa., Wyandotte and Riverview, Mich., Calvert City and Marion, Ky., and Houston, Tex.

These units produce a variety of organic and inorganic chemicals for industrial use. Distribution of these products is now handled by a combined sales organization serving the eastern, southern and central areas through 16 sales offices. Similar products for western markets are produced in the Tacoma, Wash., and Portland, Ore., plants of Pennsalt's western division.

Warner-Lambert Holders Approve Nepera Purchase

Stockholders of Warner-Lambert Pharmaceutical Company, Morris Plains, N. J., have approved acquisition of Nepera Chemical Company, Yonkers, N. Y., makers of "Anahist" and other drugs.

Payment consists of 70,702 shares of new $4.50 preferred of $100 par value, and 178,079 shares of Warner-Lambert common stock.

HONORED BY APMA: Dr. William Gordon Lennox, associate professor emeritus in neurology at Harvard Medical School, who last week received the 1956 scientific award of the American Pharmaceutical Manufacturers' Association for his fight against epilepsy.

APMA Told More Epilepsy Data Needed

A $2 billion saving in the treatment of present child epileptics is possible if the medical profession and drug manufacturers would pool their information on the effectiveness of drugs used in treating epilepsy. That's the opinion of one of the country's leading neurologists.

Dr. William Gordon Lennox, associate professor emeritus in neurology at Harvard Medical School, made this estimate in accepting the 1956 scientific award of the American Pharmaceutical Manufacturers' Association at its midyear meeting in New York last week.

Dr. Lennox said information about the output of anti-epilepsy drugs would aid the "physician in knowing how many of

—*Continued on page 74*

Barrett Will Complete Phenol Expansion Soon

The Barrett Division of Allied Chemical & Dye Corporation, New York, has announced that a substantial expansion of synthetic phenol capacity at its Philadelphia, Pa., plant will be completed shortly.

The plant will have nearly twice the capacity of the original installation. According to Barrett, it will then be the largest as well as the most modern phenol installation on the eastern seaboard. The improvements now under way are scheduled for completion early in 1957.

Sylvania Takes Option On Site for Atom Plant

Sylvania Electric Products, Inc., New York, has taken options on a 150-acre site in Andover, Mass., as the proposed location for a new multi-million-dollar atomic center.

Walter E. Kingston, general manager of Sylvania's atomic energy division, said that the options have been taken by Sylvania pending the formation of Sylvania-Corning Nuclear Corporation, which will be organized as a jointly-owned company in the next several months by Sylvania and Corning Glass Works, Corning, N. Y.

Gov't Moves to Alleviate European Oil Shortage

Initial moves to narrow the gap in deliveries of oil to Western Europe, by diverting tanker movements to compensate for the closing of the Suez Canal, were taken last week with the approval by assistant Secretary of Interior Felix E. Wormser on the first two schedules recommended by the Middle East Emergency Committee.

The action came with publication by the Office of Defense Mobilization of the plan for pooling tanker operations of the fifteen American companies comprising the Middle East Emergency Committee, and a letter from Attorney General Herbert Brownell giving antitrust clearance to the plan.

The closing of the Suez, interruption of pipeline deliveries from Iraq and the rerouting of tankers around the Cape of Good Hope has caused a shortage of a minimum of 750,000 barrels of oil daily for Europe.

The plan of action now getting under way will permit most of this shortage to be made up by diverting tankers and tonnages from the Western Hemisphere and rerouting movements.

The two schedules approved last week by Mr. Wormser, who has been assigned the job of administering the plan, involve tanker movements in the Persian Gulf, the Gulf Coast of the United States, eastern Canada, South America, Mediterranean and other areas where American tankers move oil.

Schedule No. 1 provides for five major diversionary movements consisting of: (1) Diversion to Western Europe and west of Suez areas in the eastern hemisphere of supply movements from the Persian Gulf to the United States east coast and the

—*Continued on page 40*

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Sodium Hexametaphosphate in five highly soluble forms

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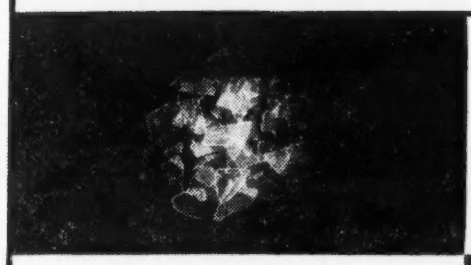
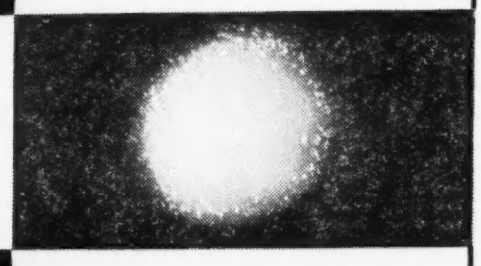


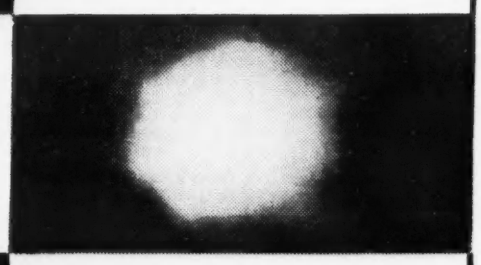
FLAKE

GRANULAR 1



GRANULAR 2

POWDER



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Backed by our production of elemental phosphorus at Pocatello, Idaho, Westvaco has completely integrated HEXAPHOS output at both Carteret, New Jersey and Newark, California. Thus, we provide uniformly high quality, dependable supply and fast delivery *to points East or West.*

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Association Meetings

American Drug Manufacturers Association, annual meeting, El Mirador hotel, Palm Springs, Calif., April 22-25.

American Pharmaceutical Manufacturers' Association, midyear and eastern section meeting, central section meeting, Edgewater Beach hotel, Chicago, February 11-13; western section meeting, Ambassador hotel, Los Angeles, February 18-19.

Association of American Soap and Glycerine Producers, annual convention, Waldorf-Astoria hotel, New York, January 23-25.

Chemical Buyers' Group, National Association of Purchasing Agents, midwinter meeting, western division, Congress hotel, Chicago, January 24; eastern meeting, Commodore hotel, New York, January 29.

Chemical Specialties Manufacturers Association, midyear meeting, Drake hotel, Chicago, May 20-22.

Chemical Market Research Association, Sheraton hotel, Philadelphia, March 12-13.

Commercial Chemical Development Association, plastics meeting, Statler hotel, New York, March 27-28; resort meeting, French Lick, Ind., May 13-14.

Council for Agricultural and Chemurgic Research, annual chemurgic conference, Congress hotel, Chicago, March 26-28.

Drug, Chemical and Allied Trades section of New York Board of Trade, annual dinner, Waldorf-Astoria hotel, New York, March 7; annual meeting, Galen Hall, Wernersville, Pa., September 19-21.

Essential Oil Association, annual meeting and dinner, Savoy Plaza hotel, New York, January 4.

Federal Wholesale Druggists' Association, midyear meeting, Statler hotel, New York, March 7-9.

Federation of Paint and Varnish Production Clubs, annual convention, Bellevue-Stratford hotel, Philadelphia, October 30-November 2.

National Agricultural Chemicals Association, spring meeting, Fairmont hotel, San Francisco, March 6-8.

National Industrial Conference Board, fifth conference on atomic energy, Benjamin Franklin hotel, Convention Hall, Philadelphia, March 14-15.

National Paint, Varnish and Lacquer Association, annual convention, Sheraton-Park and Shoreham hotels, Washington, D. C., November 4-6.

National Plant Food Council, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 9-13.

Nuclear Congress, Convention Hall, Philadelphia, March 11-15.

Pharmacy Section of the American Association for the Advancement of Science, symposium on cosmetics, Statler hotel, New York, December 27.

Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, Penn-Sheraton hotel, Pittsburgh, Pa., March 4-8.

Society of Plastics Engineers, annual technical conference, Sheraton-Jefferson hotel, St. Louis, Mo., January 16-18.

Society of Plastics Industry, annual conference and Pacific Coast plastics exposition, Shrine Exposition Hall, Los Angeles, March 18-21.

Middle East Control of Oil Called European Business Key

Over the long pull, Western Europe may be expected to do business with whoever controls the Middle East oil fields regardless of ideologies, Oscar Chapman, former Secretary of the Interior, told the Interstate Oil Compact Commission's annual meeting in Miami Beach, Fla., last week. "In fact, it has little other choice," he said. The vastness of the Middle East proven oil reserves, estimates of United States domestic oil consumption in the future and the almost total absence of oil reserves in Free Europe point up this fact, Mr. Chapman continued.

AMMONIA INSTITUTE HEAD: Fred M. Stewart, vice-president and general manager of Agricultural Ammonia Service, Inc., Santa Paula, Calif., who on January 1 will become the seventh president of the Agricultural Ammonia Institute.

He emphasized that the far-sighted domestic oil industry, assisted by prudent governmental programs long in effect, has wisely achieved and maintained an excess reserve productive capacity. "This can be made available to our friends abroad," he said.

All of First Importance

"For our own security, nothing transcends the availability of the oil required to fuel our military machines and essential civilian requirements. This can be achieved by the incentives to discover additional reserves and by prudent conservation measures," he continued.

A vigorous and competitive oil industry coupled with proven conservation practices should be our yardstick of the future, Mr. Chapman concluded.

Crude oil imports are not reliable in times of international stress, the commission emphasized. It set forth its feelings

—*Continued on page 43*

Pharmacists to Hear Cosmetics Symposium

The section on pharmacy of the American Association for the Advancement of Science will hear a symposium on cosmetics, sponsored by the committee on cosmetics of the American Medical Association, at its 123rd meeting at the Statler hotel, New York, December 27.

Introductory comments will be made by the section chairman, Rudolph H. Blythe, of Smith, Kline & French Laboratories, Philadelphia.

The symposium, titled "The New Role of Cosmetics," will be moderated by Veronica L. Conley, of the American Medical Association, Chicago.

Dr. Paul G. I. Lauffer, of George W. Luft Company, Long Island City, N. Y., will speak on "The Scientific Formulation of Cosmetics."

"The Essentials of Skin Cleansing" will be discussed by Dr. Raymond R. Suskind, of Kettering Institute, Cincinnati, Ohio.

"The Control of Axillary Sweating and

—*Continued on page 74*

GAF Ethylene Facility Contracts Go to SD Plants

Construction contracts have been awarded to SD Plants, Inc., New York, by General Aniline & Film Corporation for an $8 million plant for the production of 60 million pounds per year of ethylene oxide and 35 million pounds per year of ethylene glycol. Construction has already begun at Linden, N.J.

SD Plants, Inc., is the construction subsidiary of Scientific Design Company, New York, which is in the process of designing and engineering the GAF plant based on SD's direct air oxidation process.

Pharmacy's Cooperation Cuts Drug Substitution Two-Thirds In Three Years, Hardt Says

The cooperation of the pharmacy profession with the National Pharmaceutical Council has resulted in more than a two-thirds cut in the rate of substitution in prescriptions in the last three years, Robert A. Hardt, president of the council, reported last week. Addressing the NPA's annual luncheon in the Waldorf-Astoria hotel, New York, Mr. Hardt, who is vice-president of Hoffmann-La Roche, Inc., Nutley, N. J., said the success of the campaign has been due in large part to the acceptance by pharmacists themselves of the principle of prescription integrity.

Just a few years ago, only a few state boards of pharmacy could be counted upon to take action against druggists who use substitute drugs in compounding prescriptions, he said. Today, "that ratio has been precisely reversed. And even from those few states which have yet to take a positive stand, we're beginning to hear hopeful signs."

Decreasing Steadily

Recent surveys, Mr. Hardt said, confirm an estimate that the current rate of substitution is less than one-third of that existing in 1954. In some "particularly troublesome areas," he added, where the substitution ratio was running as high as 15 to 20 percent, the percentage has dwindled to between 2 and 4.

"But this is not a time to sit back and admire our successes or suspend our efforts," Mr. Hardt said. "Indeed, that time will never come. The personnel of the state boards of pharmacy is continually changing. New students are entering the colleges. The work of the council must go on."

One important council effort soon to get under way, Mr. Hardt said, is the nationwide distribution to physicians of a booklet explaining why prescription brand names are important, and giving reasons why the substitution of drugs for those specified by the physician can be medically dangerous. These reasons include loss of potency, incompatibility, impurity and absence of quality controls.

"In the choice of weapons in our precision warfare on disease, there's seldom a therapeutic agent that's 'just as good,' to say nothing of a 'second best.' " Mr. Hardt said.

"The pharmacist is the final link in a chain which must function unbroken—from research to testing to production to distribution to prescription to pharmacy to patient—if the patient is to receive in good faith 'just what the doctor orders.' "

The NPC is one of three effective in-

—*Continued on page 66*

COSMETIC SOCIETY PRESIDENT: Sabbat J. Strianse, director of toiletries research of Shulton, Inc., New York, who has become president of the Society of Cosmetic Chemists.

Interchemical Starts Up Pilot Laboratory in N. J.

To augment the facilities of its central research laboratories in New York City, Interchemical Corporation, New York, has opened a new pilot laboratory at Hawthorne, N. J.

It is capable of reproducing normal laboratory procedures on a large scale and will make possible the broader development of laboratory processes by use of full-scale equipment.

The output, ranging from ten to 500 pounds, will make possible sufficient quantities of products to estimate market potentials and to uncover some of the technical problems that may arise in full-scale production.

The new installation will enable Interchemical's central research laboratories to determine, in advance, how processes and products will act during actual production.

The equipment in the new pilot laboratory is capable of making investigations in nitration, halogenation, sulfonation, reduction, oxidation, condensation, diazotination, coupling, animation, alkylation and hydrogenation.

ADM Buys Share Of Dutch Company

Archer-Daniels-Midland Company, Minneapolis, Minn., has purchased an interest in a leading Holland manufacturer of resins and plasticizers, Scado Kunstharsindustrie, N V, with plant and offices at Zwolle. Under terms of the transaction, its name will be changed to Scado-Archer Daniels, N V.

T. L. Daniels, president, will join the board of directors of the Netherlands company.

ADM also has licensed Scado to use its formulas and know-how in the manufacture of ADM resins, copolymers and plasticizers, according to Mr. Daniels. The European company will serve primarily the Netherlands and Belgium but also will engage in export marketing.

H. V. Whelan, vice-president in charge of ADM's international division, said Scado Kunstharsindustrie was organized about ten years ago. It produces a number of highly-specialized plasticizers, which are vital ingredients of vinyl plastics, as well as phenolic resins used in making plastic moldings and alkyd, urea and other resins employed in paintmaking.

Scado researchers and technicians will visit ADM's headquarters and central research laboratory in Minneapolis soon to coordinate the research and production programs of the two concerns.

Uhe Adds Technical Head

Dr. Eric J. Reedman has joined George Uhe Co., New York, as technical director. Dr. Reedman was formerly in charge of the medicinal chemicals program of International Minerals & Chemical Corporation, Chicago.

Tranquilizers Replacing Bulk of Shock Treatment

Electric and insulin shock treatment for mental illness has been reduced by an estimated 90 percent at Veterans Administration mental hospitals through use of the new tranquilizing drugs, VA has announced.

In addition, the tranquilizers are permitting better treatment for mentally ill veterans, with the result that more patients can return home by discharge from hospitals and trial visits, Dr. Ivan F. Bennett, chief of psychiatric research in the VA central office at Washington, D. C., said.

The drugs enable VA hospitals to make more efficient use of personnel, since there is no longer a need to maintain teams of personnel in shock units. These personnel now can work directly with patients in their other activities, Dr. Bennett said.

In addition, treatment with the tranquilizing drugs is less expensive than insulin shock treatment.

"However," Dr. Bennett said, "there still remain mentally ill patients in VA hospitals whose conditions cannot be relieved by the newer methods or who remain resistant to the effect of tranquilizing drugs. These patients, in order to have the best available treatments in modern psychiatry, are receiving shock therapies."

Tranquilizing drug therapy, like the older shock therapies, is not a cure for mental illness, Dr. Bennett said. He explained that the drug therapy results in such a degree of improvement in symptoms that patients are happier in their relationships with others, often are able to be at home with their families, and often can be gainfully employed.

Dr. Bennett's estimate of an overall 90 percent reduction in electric and insulin shock treatment was made from a representative sampling of VA neuropsychiatric hospitals throughout the nation.

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. . . And because it is so delightfully free from grittiness, Merck Magnesium Trisilicate can improve the palatability and consumer acceptance of your antacid. Like all MERCK FINE CHEMICALS, Magnesium Trisilicate is produced to meet the most rigid standards. Clean, white, and odorless, its good flow characteristics and its ability to assume proper viscosity in suspensions in a relatively short time can mean important production savings. These are a few of the key reasons why it will pay you to specify Merck for Magnesium Trisilicate—typical of the quality of MERCK FINE CHEMICALS such as Bismuth Salts, Iodides, Salicylates, or Sulfonamides.

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CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, December 14 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Acacia (see Gum arabic).

Acenaphthene, below 92.5 C., m.p., dms., works lb. .40 - —
above 92.5 C., m.p., bbls., dms., lb. .41 - .50

Acetaldehyde, 99%, dms., c.l., works, lb. .12 - —
l.c.l., works lb. .13½- —
tanks, works lb. .10 - —

Acetaldol (see Aldol).

Acetanilide tech. flaked, bbls., bgs., c.l., frt. alld lb. .30½- —
ton lots lb. .31½- —
smaller lots lb. .34½- —
USP, bbls., 2,000-lb. lots lb. .79 - —
smaller lots lb. .80 - .81

Acetic anhydride, aluminum ret., dms., c.l., dlvd. E lb. .15½- —
l.c.l., dlvd E lb. .17 - —
tanks, dlvd E lb. .14 - —

Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
l.c.l., dlvd lb. .81 - —

Acetoacet-o-chloroanilide, fib dms., c.l., dlvd 1.35 - —
l.c.l., dlvd lb. 1.36 - —

Acetoacet-o-toluidide, fib. dms., c.l., dlvd. lb. .82 - —
l.c.l., dlvd lb. .83 - —

Acetone, CP dms., c.l., dlvd. lb. .10½- —
l.c.l., dlvd lb. .11½- —
tanks, dlvd lb. .08 - —

Methyl (see M).

Acetonitrile, dms., c.l., works lb. .45 - —
l.c.l., works lb. .47 - —

Acetophenetidin, USP, bbls., works, frt. equald lb. 1.17 - 1.19

Acetophenone, cns., dms. lb. 1.21 - 1.85
tech., dms., l.c.l., works lb. .75 - —

N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 - 1.85

Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E of Denver lb. .36 - —
l.c.l., frt. alld. E. of Denver lb. .35 - —
tanks frt. alld E. of Denver. lb. .33 - —

Acetyltriethyl citrate, tech., non-ret dms., c.l., frt. alld. E. of Denver lb. .39 - —
l.c.l. frt. alld E. of Denver. lb. .40 - —
tanks frt. alld. E. of Denver. lb. .37 - —

Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt alld lb. .60 - —

Acid, abietic, coml., dms., c.l., works lb. .12 - —
l.c.l., ex whse lb. .1490- —
cryst., dms. c.l., works lb. .06½- —
l.c.l., works lb. .07 - .07½

Acetic, coml. or redist., 28%, bbls 100 lbs. 4.80 - —
56% bbls 100 lbs 8.25 - —
70% bbls 100 lbs. 9.95 - —
80% bbls 100 lbs.10.45 - —

glacial syn. CP. dms., dlvd 90 lbs.22.00 -23.00
tech. dms. c.l. dlvd 100 lbs.13.75 - —
l.c.l., dlvd. 100 lbs.14.25 - —
tanks, dlvd 100 lbs.10.00 - —
USP cbys. inclusive, dlvd., 100 lbs.31.00 -32.00

Acetic anhydride (see Acetic anhydride above)

Acetylsalicylic, USP, special, makers, primary distrib., bbls. 1,000-lb lots, point of shipt lb. .61 - —
standard, fine, cryst., gran., (30-40 mesh) powd. (60 mesh) bbls 1,000-lb lots, same basis lb. .56 - .58

Freight equald, shipt identical quantity over standard routes, from N. Y., Phila. Midland, Mich. Chicago and St. Louis.

Adipic, bgs., c.l. dlvd lb. .32 - —
l.c.l., dlvd lb. .34¾- —

Aminoacetic NF bbls., frt. adjusted lb. 1.50 1.75

p-Aminobenzoic, tech. dry, dms., works lb. 1.74 1.77
USP dms. 1,000-lb lots or more, works lb. 2.60 - —
smaller lots, works lb. 2.65 - 2.75

p-Aminosalicylic, dms. 100 lbs or more, frt adjusted lb 3.70 —

Anthranilic 99%, 150-lb. dms., dlvd lb. 1.13 - —

Arsenous, tech (see Arsenic, white).
USP (see Arsenic trioxide)

Ascorbic USP dms. 25-100 kilo lots kilo.12.00 - —
10 kilo lots kilo.12.35 - —
5 kilo lots kilo.12.75 - —
bots 1-kilo lots kilo.13.00 - —
500-gram lots kilo.13.50 - —

Battery, cbys. c.l., works, E. 100 lbs 2.35 - —
l.c.l. works, E 100 lbs 2.65 3.45

Acacia—Acid, Itaconic

Acid, benzoic, tech., bbls., dms., 100 lb lots or more lb. .44 - —
USP, bbls. dms. 100-lb. lots or more lb. .54 - —

Betahydroxynaphthoic (see Acid, b-Oxynaphthoic).

Betaoxynaphthoic (see Acid b-Oxynaphthoic).

Boric, tech., 99.9%, cryst., bgs., c.l., works ton.126.75 - —
ton lots, ex whse, N. Y. or Chi ton.178.50 - —
smaller lots, same basis, ton.183.50 - —
dms., c.l., works ton.151.25 -172.25
ton lots, ex whse, N. Y. or Chi ton.203.00 -223.00
smaller lots, same basis, ton.208.00 -228.00
gran., bgs., c.l., works ton.101.75 - —
ton lots, ex whse, N. Y. or Chi ton.153.50 - —
smaller lots, same basis, ton.158.50 - —
dms., c.l., works ton.126.25 -147.25
ton lots, ex whse, N. Y. or Chi ton.178.00 -198.00
smaller lots, same basis, ton.183.00 -203.00
bulk, c.l., works ton.95.75 - —

Acid, boric, tech., 99.9% powd., bgs., c.l., works ton.106.75 - —
ton lots, ex whse, N. Y. or Chi ton.158.50 - —
smaller lots, same basis, ton.163.50 - —
dms., c.l., works ton.131.25 -152.25
ton lots, ex whse, N. Y. or Chi ton.183.00 -203.00
smaller lots, same basis, ton.188.00 -212.00

USP boric acid $25 per ton higher.

Broenners, bbls lb 1.76 —

Butyric, 99%, dms., c.l., frt. equald. lb. .34 - —
l.c.l., same basis lb. .34½- —
tanks, same basis lb. .32½- —

Capric, dms lb. .25 .27

Caprylic, dms lb. .25 .27

Cassella dms. frt alld., 100% basis lo 1.44 1.75

Castor oil, dms lb. .17¾- .19¾

Chicago paste bbls., frt. alld lb. 3.21 —

Chloroacetic mono purif., flake, 99% dms lb. 23½ 25½
tech. flake 96-97% dms., frt. equald lb .20 .21

o-Chlorobenzoic, fib dms., t.l., works lb 1.10 —
smaller lots, works lb. 1.25 - —

Acid, p-chlorobenzoic, fib dms., 2,000 lbs or more, works lb 2.25 - —
less than 2,000 lbs., same basis, lb 2.30 - —

Chlorosulfonic, dms., c.l., frt. l.c.l., frt equald lb. .0465- —
tanks, frt equald lb. .0515- —
lb. .0415- —

Acid, chlorosulfonic, in stainless steel dms. ½c per lb higher

Chromic, 99¾%, dms., c.l., works, frt. equald lb. .29½- —
l.c.l., dlvd. N. Y. Metropolitan area lb. .30 - .31

NF (see Chromium trioxide).

Cinnamic, refd., bots lb 2.50 3.50

Citric, USP anhyd. gran., fine gran., bgs., dms., c.l. lb. 29½ .30
10,000-lb lots, 1 shipt, lb. .30 .30¼
smaller lots lb. .30½- .31

hydrous, gran. fine gran., bgs. dms., c.l lb. .27½ .28
10,000-lb lots, 1 shipt, lb. .28 .28¼
smaller lots lb 29 .29¼

Powdered citric acid ½c higher.

Cleve's, mixed, bbls lb. 1.05 - —

Coconut oil, dist., dms lb. .25 - .27
tanks lb. .23 - —
dbl dist., dms lb. .25 - .27
tanks lb. .23 - .24

Corn oil, dist., dms lb. 16¾- .18¾
tanks lb. .14¾- —

Cottonseed oil dist., dms lb. .15¾- .17¾
tanks lb. .13¾- —

2,3-Cresotic, dms., ton lots, works. lb. .70 - —
less than ton lots, works lb. .72 - —

Cresylic, oaltar, dom., resin and tricresyl phosphate grade, 50%, 207° or above, tanks, frt. equald. gal. 1.10 - —
204° to 207° C., tanks, frt. equald gal. 1.20 - —
non-resin grade, 50%, 210° or above, total range over 9° C., dms., c.l., frt. equald. gal. 1.15 —
l.c.l., frt equald gal. 1.19 - 1.20
tanks, frt. equal l gal. 1.00 - —
imp. 75% at 215° C. or over, dms., ex whse gal. .95 - —
petroleum, dom., 195° to 214° C., non-ret. dms., 65 to c.l., works, San Francisco and Los Angeles gal. .80 - —
l.c.l. same basis gal. .82 - .84
tanks, same basis gal. .65 - —
200° C. to 222° C., tanks, Wilmington, Cal lb. .65 - .72
211° C. to 237° C., non-ret. dms., c.l., San Francisco and Los Angeles gal. .76 —
l.c.l. same basis gal. .78 - .80
tanks, same basis gal. .61 - —
220° C. to 242° C., tanks, Wilmington, Cal lb. .62 .67
245° C. to 295° C., tanks, Wilmington, Cal gal .50 - —

Crotonic, fib. dms., 200 lbs. or more, works lb. .50 —

Cyanoacetic, tech. bbls lb .90 1.25

Dichlorophenoxyacetic (see 2,4-D)

Diethylbarbituric (see Barbital)

Diglycolic, bgs. works lb. .14 - —

Dithiodibenzoic, dms., 1,000-lb. lots, works lb 1.45 - —

2-Ethyl hexoic, dms., c.l., dlvd. lb. .37 - —
l.c.l. dlvd lb. .38 - —
tanks, dlvd lb .34½- —

F, crude, paste, bbls., works lb. 2.10 - —

Folic, bots., fib. cns., kilo-lots or more gram, 1.40 - —

Formic, 85%, cbys., c.l., works lb. .1570- —
l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
l.c.l., works lb. .1675- .1775

Fumaric tech. bgs., dms., c.l., frt. alld E lb. .25½- .27
l.c.l., same basis lb. .26½- .28

Prices of fumaric acid 1½c. per lb. higher west of Denver.

Gallic NF VII bbls. 1,000-lb lots lb. 2.00 - —
smaller lots lb. 2.02 - 2.22
tech., bbls., 1,000-lb. lots lb. 1.78 - —
smaller lots lb. 1.80 - 2.00

Gamma dry grd. bbls. frt. allo lb 1.50 —
paste bbls frt allo lb 1.45 —

Gluconic, tech., 50% bots lb .23 .35
cbys lb .19 —
dms lb 15½ —

l-Glutamic 99½% fib dms., 100-lb. lots, frt. alld lb. 2.00 - —
25-lb. lots, frt. alld lb. 2.05 - —

Glycolic (see Acid hydroxyacetic).

H, dry bbls. c.l. works, 100% basis lb 1.00 - —
l.c.l., same basis lb 1.02 - —

Hydriodic, 1.50 s.g., cbys lb 2.94 - —
1.70 s.g., cbys lb 3.23 - —

Hydrobromic, medicinal, 48%, cbys., dlvd E lb. .37 .43

Hydrochloric, anhyd (see Hydrogen chloride).

18° cbys. c.l., works 100 lbs 2.50 - —
l.c.l. dlvd., Metropolitan area 100 lbs 2.90 3.09
tanks, works, frt. equald ton.28.00 - —

20° cbys., c.l., works 100 lbs. 2.75 - —
l.c.l., dlvd. Metropolitan area 100 lbs 3.15 - —
tanks, works, frt. equald ton.30.00 - —

22° cbys., c.l., works 100 lbs 3.25 - —
l.c.l., dlvd., Metropolitan area 100 lbs 3.63 - —
tanks, works, frt equald ton.35.00 - —

CP, USP consumers, cbys., extra, c.l., works lb. .15¾- —
l.c.l., same basis lb. .17¼- .17¾
5-pint bots, extra, cs., c.l., same basis lb 20¾- —
l.c.l., same basis lb. .22¼- .23¼

Acid, hydrochloric, CP, USP, prices to dealers 1½c per lb less

Hydrocyanic, cyls, c.l. dlvd lb. .70 —
l.c.l., same basis lb. .75 - .90
dilute NF, 2%, 5-lb bots lb. .40 - —

Hydrofluoric, anhyd. (see Hydrogen fluoride), aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd 100 lbs.19.25 - —
l.c.l., l.t.l., dlvd 100 lbs.20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs.21.00 - —
l.c.l., l.t.l., dlvd 100 lbs.22.50 - —
tanks, works, frt. equald. 100 lbs.15.50 - —

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington, and Wyoming. In those states add $2.70 per cwt. for drum delivery.

Hydrofluosilicic, dms. works, 30% basis lb. .06 - —

Hydroxyacetic, tech., 70%, nonret bbls., Phila., 100% basis lb. .136 - —
tanks, Belle, W. Va., 100% basis lb .095 - —

Hypophosphorus, purif., 50%, cbys lb 1.30 - 1.32
USP, cbys. lb. .88 - —

Isonicotinic, 100-lb fib dms., works lb. 4.25 - —

Hydrazide (see Isoniazid).

Itaconic, tech., fib. dms., c.l., works lb. .44 - —
l.c.l., works lb. .45 - —
purif., fib. dms., c.l., works lb. .54 - —
l.c.l., works lb. .55 - —

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	NNR	New and Nonofficial Remedies
amorph.	amorphous	djns.	demijohns		
AMP	American melting point	dlvd.	delivered	No.	number
anhyd.	anhydrous	dms.	drums	nom.	nominal
a.p.a.	available phosphoric acid	dom.	domestic	o-	ortho
		E	east	ord.	ordinary
approx.	approximately	e.p.	end point	oz.	ounce
artif.	artificial	equald.	equalized	p-	para
		exp.	expressed	Pac.	Pacific
ASTM	American Society for Testing Materials	F	fahrenheit	pf	proof
		ferment.	fermentation	phos.	phosphate
Atl.	Atlantic	f.f.a.	free fatty acid	photo.	photographic
		f.f.c.	free from chlorine	pkgs.	packages
Be.	Baume			powd.	powdered
bbls.	barrels	fib.	fiber	precip.	precipitated
bgs.	bags	f.o.b.	free on board	prod.	producer
bls	bales	f.p.a.	free of prussic acid	pt	point
bots.	bottles			pulv.	pulverized
b.p.	boiling point	frt.	freight	purif.	purified
b.p.l.	bone phosphate of lime	gal.	gallon	redist.	redistilled
		gran.	granular	refd.	refined
b.r.	boiling range	grd.	ground	refy.	refinery
bxs.	boxes	I.&a.	iron and aluminum	reg.	regular
C.	centigrade			resub.	resublimed
cbys.	carboys	i.b.p.	initial boiling point	ret.	returnable
CD	completely denatured			SD	specially denatured
		imp.	imported		
c.i.f.	cost, insurance, freight	incl	included	s.d.	single distilled
		indust.	industrial	S. E.	southeast
cks.	casks	kgs	kegs	sec.	secondary
c.l.	carlots	l-	laevo	secs.	seconds
cns.	cans	lacq.	lacquer	s.g.	specific gravity
coml.	commercial	lb	pound	ship't	shipment
conc.	concentrated	l.c.l.	less than carlots	soln.	solution
CP	chemically pure	l.t.l.	less truckload	s.u.	standard unit
		liq.	liquid	syn.	synthetic
cps.	centipoises			tanks.	railroad tankcars
cryst.	crystal	mfrs.	manufacturers	tech.	technical
cs.	cases	m-	meta	tert-	tertiary
ctns.	cartons	m.a.p.	mixed aniline point	t.l.	truck loads
cyls.	cylinders			t.w.	tank wagons
		min.	minimum	USP	U. S. Pharmacopoeia
d-	dextro	m.p.	melting point		
dbl.	double	N-	nitrogen	vis.	viscosity
denat.	denatured	n-	normal	VM&P	varnish makers & painters
dest-dist	destructive-distilled	nat.	natural		
		neut.	neutral	W	west
dl-	dextro-laevo	NF	National Formulary	whse.	warehouse
dist.	distilled			w. w.	water-white

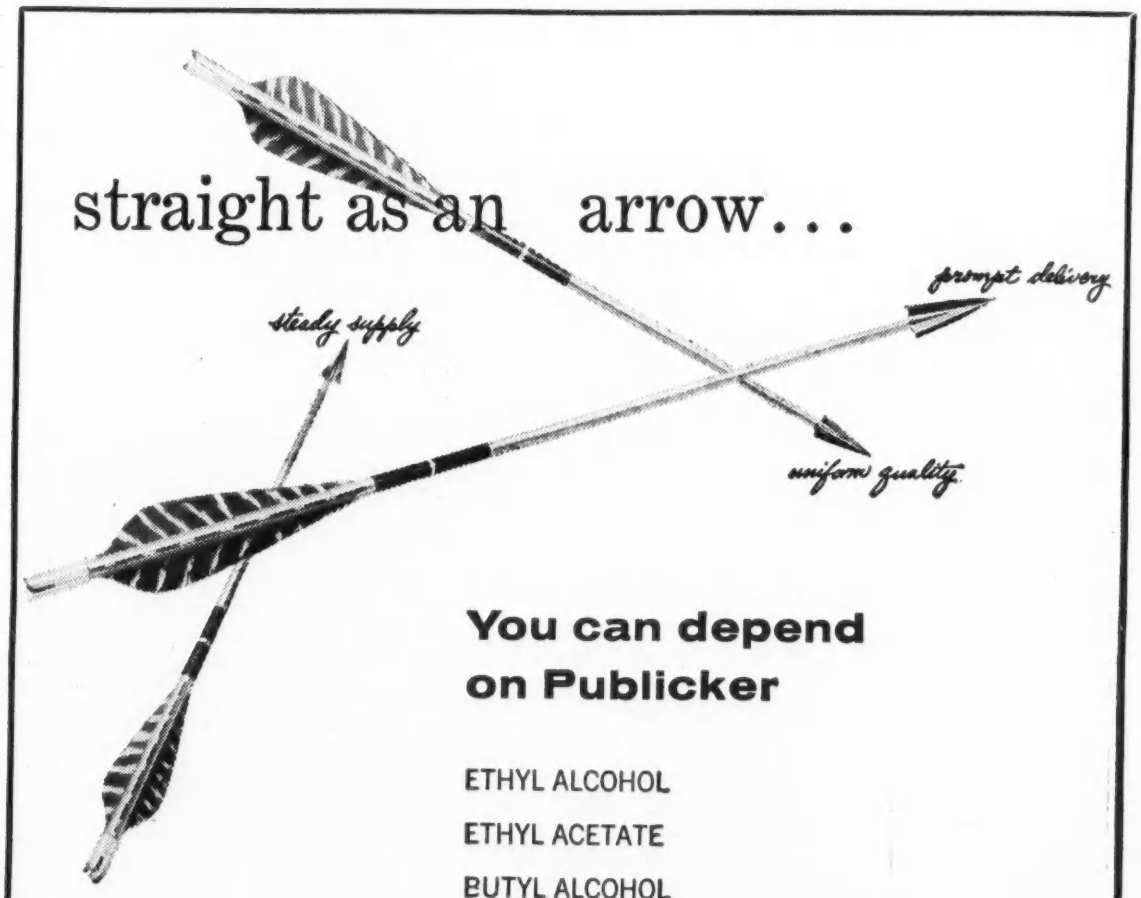
A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Acid, J, paste, bbls., works, 100% USP, 85%, cbys. ... lb. .85 - .88
basis lb. 2.45 - —
powd., bbls., sam. basis ... lb 2.50 - 2.85
Koch, bbls., frt. alld., 100% basis. lb. 1.00 - —
L, bbls., works ... lb. 1.25 - —
Lactic, edible, 50%, bbls., 20 or more lb. .1821- .215
smaller lots ... lb. .1921- .225
80%, bbls., 5 or more ... lb. .3121- .37
smaller lots ... lb. .3171- .375
plastic grade 50%, bbls., 20 or more, works lb. .23 - —
1 to 19 ... lb. .235 - —
80%, bbls., 5 or more ... lb. .385 - —
tech., 22%, bbls., c.l., works 100 lbs. 6.30 - —
t.c.l., works 100 lbs. 6.70 - —
cbys., l.c.l., works 100 lbs. 12.20 - —
44%, bbls., c.l., works 100 lbs. 11.45 -11.95
t.c.l., works ... 100 lbs. 11.85 -12.35
Laurent's, bbls ... lb. .60 —
Lauric, 90%, dms ... lb. .36½- .38½
Linseed oil, dist., dms ... lb. .2000- —
w.w., dms ... lb. .2300- —
Maleic, cryst. powd. dms ... lb. .37 .38
Malic, tech., dms ... lb. .50 —
Mandelic, NF dms., 1,000-lb. lots. lb. 2.35 - —
smaller lots ... lb. 2.40 - 2.50
Metanilic, dms., works ... lb. .57 - .75
Methacrylic, glacial, 98%, dms., truckloads, works lb. .47 - —
smaller lots, works ... lb. .47½- .80
tanks, works ... lb. .45 - —

Acid, molybdic, 85%, dms, works lb. 1.20 - —
Monochloroacetic purif. (see Acid, Chloroacetic mono-).
Muriatic (see Acid, hydrochloric).
Myristic, dms ... lb. .26 - .28
1-naphthol-4 sulfonic (see Acid, Neville and Winthers)
1-Naphthol-5-sulfonic (see Acid, L).
1-Naphthol-5-sulfonic 8-amino (see Acid, S).
1-Naphthol-3,6-disulfonic 8-amino (see Acid, H).
2-Naphthol-6,8-disulfonic (see Acid, Gamma).
5-Naphthol-7-sulfonic 2-amino (see Acid, J).
Naphthol sulfonic mixed (see Acid, Cleve's).
1-Naphthylamine-5-sulfonic (see Acid, Laurent's).
2,Naphthylamine-4,8-disulfonic (see Acid, Cassella).
2-Naphthylamine-6-sulfonic (see Acid, Broenner's).
2-Naphthylamine-7-sulfonic (see Acid, F).
2-Naphthylamine-1-sulfonic (see Acid Tobias).
Nevile and Winther's, dms., frt. alld lb. 1.30 - —
Nicotinic, USP, dms., dlvd kilo. 8.00 - 8.30
Amide, USP (see Nicotinamide).
Nitric, 36° Be, cbys., c.l., works, E 100 lbs. 5.75 - —
t.c.l., works, E ... 100 lbs. 6.05 - 6.85
38° Be, cbys., c.l., works, E. 100 lbs. 6.25 - —
t.c.l., works, E ... 100 lbs. 6.55 - 7.35
40° Be, cbys., c.l., works, E. 100 lbs. 6.75 - —
t.c.l., works, E ... 100 lbs. 7.05 - 7.85

Acid, nitric, 42° Be, cbys., c.l., works, E 100 lbs. 7.25 - —
t.c.l., works, E ... 100 lbs. 7.55 - 8.35
58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
CP, NF, consumer, cbys., extra, c.l., works ... lb. .18½- —
t.c.l., same basis lb. .20 - .20½
5 pt. bots. extra, cs., c.l., same basis lb. .22½- —
t.c.l., same basis lb. .24 - .25
p-Nitrobenzoic, dms., c.l., works. lb. .72 - —
t.c.l., works ... lb. .73 - —
Oleic, s.d., dms ... lb. .18½- .20½
tanks ... lb. .16½- —
dbl. dist. (white) dms. ... lb. .20½- .22½
tanks ... lb. .18½- —
Oleum (see Acid, sulfuric, fuming).
Orthochlorobenzoic (see Acid, o-Chlorobenzoic).
Orthocresotinic (see Acid, 2,3-Creosotic).
Oxalic, bbls., c.l., works ... lb. .16½- —
10,000-lb. lots, works ... lb. .16¾- —
smaller lots, works ... lb. .17¾- —
b-Oxynaphthoic, fib. dms. 250 lbs. or more, frt. alld lb. 1.14 - 1.17
Palm. dist., dms ... lb. .14¾- .16¾
tanks ... lb. .12¾- —
Para aminobenzoic (see Acid, p-Aminobenzoic).
Para aminosalicylic (see Acid, p-Aminosalicylic).
Parachlorobenzoic (see Acid p-Chlorobenzoic).
Paramethylphenylcinchonic (see Neocinchophen).
Paranitrobenzoic (see Acid p-Nitrobenzoic)
Paratoluidinmetasulfonic (see Acid p-toluidine-m-sulfonic).
Peri, dry, frt. alld, ... lb. 1.35 - —
paste, frt. alld, ... lb. 1.30 - —
Phenylacetic, pure, cryst., cns. lb. 1.45 - 1.75

Acid, phenylcinchoninic (see Cinchophen).
Phenylglycolic (see mandelic)
Phosphoric, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs. 6.75 - —
t.c.l., same basis 100 lbs. 7.00 - 7.50
tanks, works 100 lbs. 5.35 —
80%, cbys. c.l., frt. alld. 100 lbs. 7.60 - —
t.c.l., works 100 lbs. 7.85 - 9.10
tanks, works ... 100 lbs. 5.75 —
NF, 85%, cbys., c.l., works lb. .0825- —
c.l., works ... lb. .0850- .087$
tanks works ... lb .0640- —
Picric, NF, bbls ... lb. .85 - —
tech., bbls ... lb. .44 - —
Propionic, syn. pure, dms., c.l., works lb. .22¾- —
t.c.l., works ... lb. .23¾- —
tanks, works ... lb. .20¾- —
Pyrogallic, NF (see Pyrogallol)
tech., bbls ... lb. 3.17 - 3.25
Ricinoleic (see Acid, castor oil, split).
S., bbls., works lb 3.25 - —
Salicylic, crude fib dms. c.l., frt. alld lb. .35 - —
t.c.l., frt. alld c. .00 lbs. or more lb. .36 - —
sublimed, tech. fib dms., c.l., dlvd lb. .37 - —
t.c.l., dlvd ... lb. .41 - —
USP, cryst., fib dms lb. .48 - —
powd. fib dms lb. .55 - —
Sebacic, purif., dms. c.l. works. lb. .64 - —
t.c.l., works ... lb. .66 - .70
Soybean oil, dbl dist., dms lb. .18¾- .20¾
tanks ... lb. .16¼- —
s.d., dms ... lb. .17¼- .19¼
tanks ... lb. .15¼- —
Stearic, dbl pressed, bgs ... lb. .15¼- .17¼
single pressed, bgs ... lb. .14¾- .16¾
triple pressed, bgs lb. .17½- .19½
Succinic, purif., cryst., bbls., works lb. .62 - .75
Sulfanilic, tech. dms. c.l., frt. alld lb. .21 - —
t.c.l., frt. alld ... lb. .23 - —
Sulfuric 60° Be cbys., c.l., works 100 lbs. 2.00 - —
t.c.l., works 100 lbs. 2.45 - —
tanks, works ton. 18.60 - —
66° Be, cbys., c.l., works. 100 lbs. 2.25 - —
t.c.l., works ... 100 lbs. 2.55 - 3.35
tanks, works ... ton. 22.35 - —
93% tanks, works ... ton. 23.50 - —
99-100% tanks works .. ton. 23.95 - —
CP, NF, consumers frt. equald. lb. .12¾- —
t.c.l., same basis lb. .14¼- .14¾
5-pt. bots., extra cs., c.l., works, frt. alld lb. .16¼- —
t.c.l., same basis lb. .18¼- .18¾
fuming (oleum), 20%, tanks, works ton. 25..0 - —
40%, tanks, works .. ton. 29.00 - —
65%, tanks, works ... ton. 39.50 - —
Tall oil, dms., c.l., works .... lb. .09 - .09½
tanks, works .... lb. .07½- .08
Tallow dist. dms ... lb. .15¼- .17¼
tanks ... lb. .13¼- —
hydrogenated, dms ... lb. .14¼- .16¼
Tannic, NF fluffy bbls. 1,000-lb. lots lb. 2.05 - —
smaller lots lb. 2.06 - 2.10
powd., bbls., 1,000-lb. lots lb. 1.90 - —
smaller lots lb. 1.96 - 2.01
tech., dms lb. 1.05 - —
Tartaric, USP, dom., 230 or 250-lb. dms., c.l lb. .49 - —
10,000-lb. lots, 1 shipt. lb. .49½- —
smaller lots ... lb. .50 - —
100-lb. dms ... lb. .51 - —
imported, bgs ... lb. .42 - .45
Thioglycolic, refd. cbys., 100% basis lb. 1.35 - 1.55
Thiosalicylic, purif., dms., 1,000-lb. lots, works lb. 4.00 - —
Tobias, bbls., frt. alld lb. .81 - —
p-Toluenesulfonic, dms., c.l., t.l., works lb. .17 - —
t.c.l., works lb. .18 - —
p-Toluene sulfonic, monohydrate, dms., c.l., or t.l lb. .90 - —
125 lbs to t.l lb. 1.00 - —
o-Toluidine-m-Sulfonic, frt. alld. lb. .70 - —
p-Toluidine-m-sulfonic, bbls., works lb .92 - 1.04
Trichloroacetic, bots lb. 2.00 - 2.50
Trichlorophenoxyacetic (see 2,4,5-T).
Tungstic, tech., dms., 1,000-lb. lots, works lb. 3.00 - —
smaller lots, works ... lb. 3.15 - 3.50
Undecylenic, dms lb. 1.40 - —
Aconite root, bls ... lb. .50 - .55
Acrolein, tech. dms., c.l., works lb. .47 - —
t.c.l., works ... lb. .47½- —
tanks, works ... lb. .46 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .31 - —
t.c.l., t.t.l., frt. equald ... lb. .32 - —
tanks, frt. equald ... lb. .28 - —
ACTH, cryst., bulk 1,000 units/gram, bots gram. 15.00 - —
Adeps lanae (see Lanolin)
Adrenocorticotropic hormone (see ACTH).
Agar, USP Kobe No. 1, strip, bls. lb. 2.25 - —
powdered, 30 mesh, fib., dms lb. 2.75 - —
dl-Alanine, dms., works lb. 8.50 -11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms ... lb. .65 - 1.00
Egg, edible, cryst., powd., bbls. lb. 1.69 - 1.71
flake ... lb. 1.65 - 1.67
tech., cryst., bbls ... lb. 1.08 - 1.10
Alcohol, allyl, dms., c.l. dlvd ... lb. .32 - —
l.c.l., dlvd ... lb. .33 - —
tanks, dlvd ... lb. .30 - —
Amyl, ex fusel oil (see Fusel oil, refd.)
ferment., refd., 128°-132°C., dms., l.c.l., dlvd lb. .43 - —
ACS grade dms., l.c.l., dlvd lb. .45 - —
ex-pentane, mixed, amyls, dms., c.l., frt. alld lb. .18½- —
l.c.l., frt. alld ... lb. .19½- —
tanks, frt. alld ... lb. .16 - —
primary, dms., c.l., frt. alld. lb. .19¾- —
l.c.l., frt. alld ... lb. .20¾- —
tanks, frt. alld ... lb. .17¾- —
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
l.c.l., works ... lb. .20 - —
tanks, works ... lb. .17 - —
tert-synthetic, dms., c.l., frt. alld. E lb. .18½- —
l.c.l., frt. alld E ... lb. .19½- —
tanks, frt. alld E ... lb. .16 - —
1-pentanol, (syn normal), dms., c.l. works lb. .41½- —
l.c.l., works ... lb. .42½- —
tanks, works ... lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
l.c.l., works ... lb. .70 - —
tanks, works ... lb. .60 - —
Benzyl, NF, dms ... lb. .64 - .79
tech., dms., dlvd ... lb. .47½- .49
n-Butyl, ferment dms., c.l., frt. alld. lb. .16½- —
l.c.l., frt. alld ... lb. .17½- —
tanks, frt. alld ... lb. .14 - —
synthetic, dms., c.l., dlvd ... lb. .16½- —
l.c.l., dlvd ... lb. .17½- —
tanks, dlvd ... lb. .14 - —
sec-synthetic dms., c.l., dlvd. lb. .14½- —
l.c.l., dlvd ... lb. .15½- —



You can depend on Publicker

ETHYL ALCOHOL
ETHYL ACETATE
BUTYL ALCOHOL
BUTYL ACETATE
ACETONE
ACETALDEHYDE
ACETIC ACID
AMYL ACETATE
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ISOAMYL ALCOHOL

PUBLICKER INDUSTRIES Inc.
1429 WALNUT STREET, PHILADELPHIA 2, PA.
NEW YORK • NEW ENGLAND • MIDWESTERN DISTRIBUTORS, PUBLICKER ALCOHOL & CHEMICAL SALES CORP.
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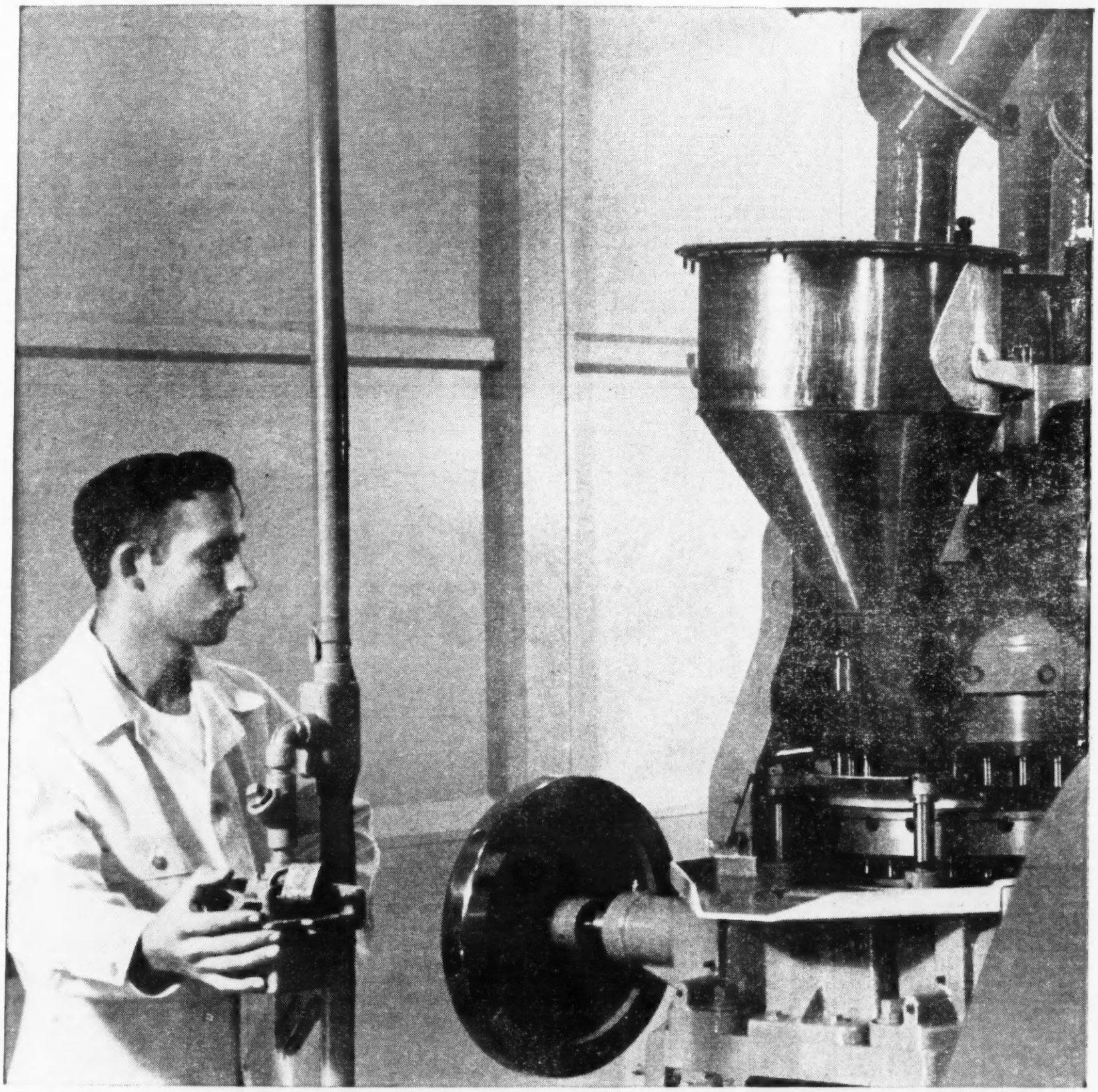


End your "pains" in production *with Dow Acetophenetidin, U.S.P.*

THE FINE CRYSTALLINE STRUCTURE OF THIS ANTIPYRETIC AND ANALGESIC CAN MINIMIZE CAKING AND BLOCKING TROUBLES

Dow Acetophenetidin, U.S.P.. can well be your answer to more profitable uninterrupted production of fever and pain relievers.

For the fine, uniform crystalline structure of this important antipyretic and analgesic brings a smooth flow to slugging operations. It also turns in an excellent performance in processes of the wet granulation type. In short, it spells the end of troublesome caking and blocking.

Quality control assures you uniformity on every order, and multiple shipping points assure you of a ready supply. Dow research has supported development of acetophenetidin and today provides a quality product that is easy to tablet, capsulate, or prepare in powdered form.

To evaluate our acetophenetidin firsthand, write us for further data and a sample. THE DOW CHEMICAL COMPANY, Dept. PH 884D, Midland, Michigan.

you can depend on DOW CHEMICALS DOW

Alcohol, n-butyl, sec-synthetic, tanks, dlvd ..... lb. .12 - —
tert-synthetic dms., c.l. frt alld. lb. .14 - —
l.c.l., frt. alld ..... lb. .15 - —
tanks, frt. alld. ..... lb. .12 - —
Capryl, 85%, dms., c.l. and t.l., works lb. .18 - —
l.t.l., same basis ..... lb. .18½ - —
tanks, frt. equald ..... lb. .16½ - —
sec., 92-99%, dms., c.l. ..... lb. .22 - —
l.c.l. ..... lb. .23 - —
tanks ..... lb. .19½ - —
Cetyl, extra, fib. cns., 500-lb. lots or more lb. .65 .72
NF, fib. cns., 140-lb. lots or more lb. .48 —
Cinnamic, bots ..... lb 2.15 2.75
Decyl mixed isomers, dms., c.l., dlvd. lb. .23½ —
l.c.l., dlvd ..... lb. .24½ —
tanks, dlvd ..... lb. .21 —
perfume grade, bots ..... lb. 1.75 2.00
normal (see 1-Decanol).
Denat. CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd. E. of Rockies gal. .64½ - .66
l.c.l., same basis gal. .69½ - .77
tanks, dlvd., same basis, gal. .48¼ .50

Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.

Proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .66 — —
l.c.l., same basis ..... gal. .71 - .77
tanks, same basis ..... gal. .50 — —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.

SD1, dms., dlvd. E. of Rockies, gal. .66 - —
l.c.l., same basis ... gal. .71 - .77
tanks, same basis ... gal. .50 - —
SD2B, dms., c.l., dlvd. E. of Rockies gal. .64 - —
l.c.l., same basis ..... gal. .69 - .75
tanks, same basis ... gal. .48 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .635 - —
l.c.l., same basis ... gal. .685 - .745
tanks same basis ... gal. .475 - —
SD23A, dms., c.l., dlvd. E. of Rockies gal. .655 - —
l.c.l., same basis ... gal. .705 - .765
tanks, same basis ... gal. .495 - —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .66 - —
l.c.l., same basis ... gal. .71 - .77
tanks, same basis ... gal. .50 - —
SD29, dms., c.l., dlvd. E. of Rockies gal. .645 - —
l.c.l., same basis ... gal. .695 - .755
tanks, same basis ... gal. .485 - —
SD30, dms., c.l., dlvd. E. of Rockies gal. .63 - —
l.c.l., same basis ... gal. .68 - .74
tanks, same basis ... gal. .47 - —
SD35A, dms., c.l., dlvd. E. of Rockies gal. .665 - —
l.c.l., same basis ... gal. .715 - .775
tanks, same basis ... gal. .505 - —
SD40, dms., c.l., dlvd. E. of Rockies gal. .645 - —
l.c.l., same basis ... gal. .695 - .755
tanks, same basis ... gal. .485 —

West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington, where a 5c. differential on tankcars is maintained.

Diacetone alcohol, acetone-free, dms., c.l., dlvd. lb. .15 - —
l.c.l., dlvd ..... lb. .16 - —
tanks, dlvd ..... lb. .125 - —
tech., dms., c.l., dlvd ..... lb. .145 - —
l.c.l., dlvd ..... lb. 1.55 - —
tanks, dlvd ..... lb. .12 - —
Ethyl, 190 pf., USP, tax paid, dms., c.l., dlvd. E. of Rockies gal. 20.58 - —
l.c.l., same basis gal. 20.63 - 20.69
tanks, same basis ... gal. 20.42 - —
tax free, dms., c.l., dlvd. E. of Rockies gal. .63 - —
l.c.l., same basis gal. .68 - .74
tanks, same basis ... gal. .47 - —
absolute, 200 pf. tax paid, dms., dlvd. E. of Rockies ... gal. 21.68 - —
l.c.l., same basis ... gal. 21.73 - 21.79
tanks, same basis ... gal. 21.52 - —
2-Ethylbutyl, dms., c.l., works lb. .30 - —
l.c.l., works ..... lb. .30¾ - —
tanks, works ..... lb. .28 - —
2-Ethylhexyl, dms., c.l., dlvd. E. lb. .24¼ - —
l.c.l., same basis ..... lb. .25¼ - —
tanks, same basis ..... lb. .21¾ - —
Furfuryl cns., works ..... lb. .29 - —
dms., c.l., Memphis, Tenn. ... lb. .20 - —
Newark, N. J. ..... lb. .21½ - —
l.c.l., Memphis, Tenn. ..... lb. .21 - —
Newark, N. J. ..... lb. .22¼ - —
tanks, Memphis, Tenn. ..... lb. .184 - —
Hydroabietyl, tech., solid, Zone 1, dms., c.l., dlvd. lb. .29¼ - —
l.c.l., dlvd ..... lb. .29¾ - .30¼
tanks, dlvd ..... lb. .27¼ - —

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo. and the western part of Texas.

Isoamyl, dms., c.l., works, frt. alld. E. lb. .28 - —
l.c.l., same basis ..... lb. .29 - —
tanks, same basis ..... lb. .25 - —
Isobutyl, dms., c.l., dlvd ..... lb. .15½ - —
l.c.l., dlvd ..... lb. .16½ - —
tanks, dlvd ..... lb. .13 - —
Iso-octyl, dms., c.l., dlvd. E. ... lb. .23½ - —
l.c.l., dlvd E ..... lb. .24½ - —
tanks, dlvd E ..... lb. .21 - —
Isopropyl, refd. 91%, dms., c.l., dlvd gal. .53 - —
l.c.l., dlvd ..... gal. .60 - —
tanks, dlvd ..... gal. .37 - —
95%, c.l., dlvd ..... gal. .55 - —
l.c.l., dlvd ..... gal. .62 - —
tanks, dlvd ..... gal. .39 - —
99%, dms., c.l., dlvd ..... gal. .57 - —
l.c.l., dlvd. ..... gal. .64 - —
tanks, dlvd ..... gal. .41 - —
Lauryl, bots. ..... lb. 2.00 - 2.50
Methyl (see Methanol).
Methylamyl (see Methyl isobutyl carbinol).
Octyl, perfumer's grade, bots lb. 1.60 - 3.25
tech. (see Octanol, normal).
2-Phenylethyl, extra, dms ..... lb. 1.14 1.45
standard, dms ..... lb. 1.10 1.60
n-Propyl, dms., c.l., dlvd ..... lb. .13½ - —
l.c.l., dlvd ..... lb. .14½ - —
tanks, dlvd ..... lb. .11 - —
Tetrahydrofurfuryl, dms., c.l. or t.l., f.o.b. Memphis, Tenn lb. .37 - —
l.c.l. or l.t.l., f.o.b. Memphis, Tenn lb. .38 - —
f.o.b. Newark, N. J ... lb. .40 - —
tanks, dlvd. E. of Denver ... lb. .365 - —
dlvd. W. of Denver ... lb. .375 - —
Tridecyl, mixed isomers, dms., dlvd lb. .26½ - —
l.c.l., dlvd ..... lb. .27½ - —
tanks, dlvd ..... lb. .24 - —
Wood (see Methanol).
Aidol, 95%, dms., works ..... lb. .23 - —
denaturing grade dms ..... gal. 2.15 - —
Aldrin, tech. fib. dms., c.l., t.l., dlvd lb. .80 - —
l.c.l. dlvd ..... lb. .85 - —
Aletris root, bgs. ... lb 1.75 1.85

Algin (see Sodium alginate).
Alizarine (see 1,2-dihydroxy anthraquinone).
Allethrin, 90% dms. frt alld lb 28.80 28.90
soln. 20% dms. 200-2,000 lb lots, frt. alld lb 6.50 6.55
2½% dms. frt alld lb .95 1.00
Allspice (see Pimento).
Allyl bromide, cbys., works ... lb 1.45 1.50
Chloride, dms., c.l., dlvd ... lb .17 —
l.c.l. dlvd ..... lb .18 - —
tanks, dlvd ..... lb .15 - —
Aloe, Cape, cs ..... lb. .50 - —
powd., cs ..... lb. .65 - —
Curacao, kgs ..... lb. .60 - —
Aloin, USP, bbls., dms., kgs ... lb. 3.35 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs 4.30 - —
lump, dms., works ... 100 lbs 5.05 - —
powd., dms., works ... 100 lbs 5.20 - —
USP, burnt, dms. ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾ .08
Potassium, gran., bgs., works. 100 lbs 4.55 —
lump, dms., works ... 100 lbs 5.30 —
powd., dms., works ... 100 lbs 5.45 —
USP, burnt, dms ..... lb. .20 .21
hydrous, dms ..... lb. .07¾ .08
Potash-chrome, dms ..... lb. .17 —
Alumina, calcined, bgs., c.l., works. lb. .0455 —
l.c.l., works ..... lb. .048 - .0755

Aluminum acetate, basic soln., 24%, bbls., l.c.l. works lb. .14 - —
Chloride, com'l, anhyd., dms., c.l., works, frt. equald lb. .16 - —
l.c.l., works, frt. equald. lb. .16½ - —
cryst., dms., c.l., works. 100 lbs. 16.00 - —
l.c.l., works ..... 100 lbs. 17.50 - —
soln. 32°, cbys, c.l., works lb. .0445 - —
l.c.l., works ..... lb. .0520 - .1290
tanks, works ..... 100 lbs. 3.45 - —
NF, gran., dms., works ..... lb. .29 - .30
Fluoride, tech., anhyd., bgs., c.l., works lb. .16¾ - —
l.c.l., works ..... lb. .17¾ - .19¾
Aluminum fluoride in fib. dms. 0.35c. per lb. higher.
Formate, basic soln., dms., c.l., works lb. .12 - —
l.c.l., works ..... lb. .12½ - —
Hydrate, heavy, bgs., c.l., frt. frt. equald lb. .032 - —
20,000-40,000 lb. lots, same basis lb. .0345 - —
2,000-20,000 lb. lots, same basis lb. .0445 - —
bulk, same basis ..... lb. .0295 - —
Hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 - —
contract, works lb. .21 - —
9-9½% Al_2O_3, fib. dms., works lb. .19 - —
contract, works lb. .18 - —
dried, USP XIV, fib. dms., works lb. .82½ - —
contract, works lb. .79½ - —
tech. powder (see Aluminum hydrate).
Metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .2710 - —
pigs, 10,000-lb. lots, frt. alld. lb. .2500 - —

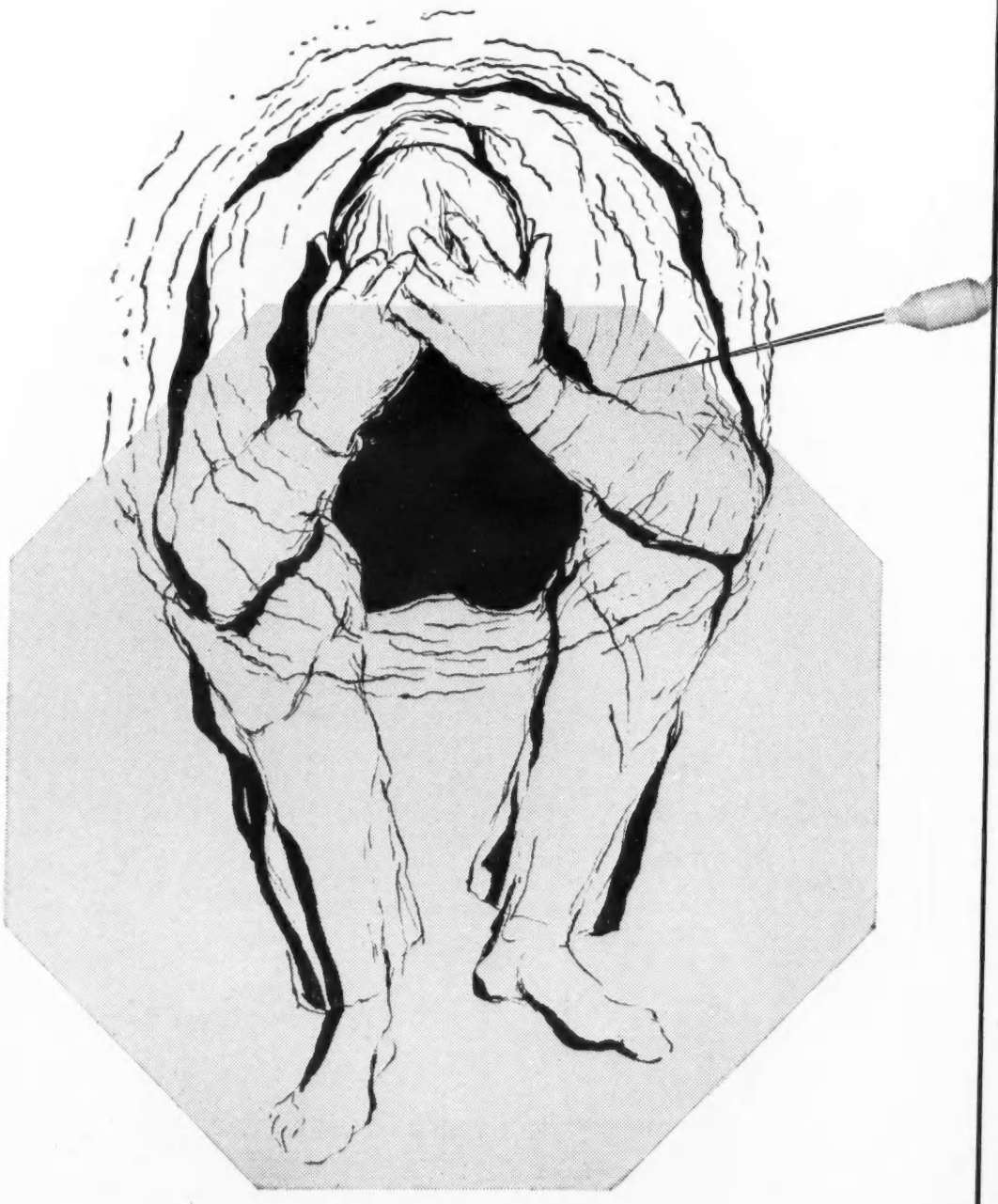
Aluminum oxide, amorphous (see Alumina, calcined).
Paste, lining, extra-fine, dms lb. .68 - —
standard grade, dms ... lb. .48 - —
Powder, lining extra, fine, dms. lb. 1.09 - —
standard grade, dms ... lb. .78½ - —

Aluminum powder and paste prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb dm., 3c. per lb. for 10-lb. can and 5c. to 12c. per lb for smaller containers. Deduct 1c. per lb for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs or over.

Resinate, precip., 2.1% Al, dms., 100 lbs. 7.26 - —
Stearate, dibasic, ctns., c.l lb. .37 - —
l.c.l. ..... lb. .38 .42
monobasic, ctns., c.l. ..... lb. .37 - —
l.c.l. ..... lb. .38 .42
tribasic, ctns., c.l. ..... lb. .37 —
l.c.l. ..... lb. .38 .42
Sulfate, coml., bulk, c.l., works. 100 lbs 1.85 —
grd., bgs., c.l., works ton 37.00 —
lump, bgs., c.l., works ton 40.00 —
Iron-free, bgs., c.l. works, frt. equald 100 lbs. 3.55 —
l.c.l. works, frt equald. 100 lbs. 3.95 4.55

Aluminum sulfate prices $1 per ton higher in the South.

USP, gran., dms., works ... lb. .29 - .30
powd., dms., works ... lb. .36 .37
Trihydrate, heavy (see Aluminum hydrate, heavy).



S. B. PENICK & COMPANY 50 CHURCH ST., NEW YORK 8 735 W. DIVISION ST., CHIC.

Ambergris, gray, bots	oz	8.00	10.00
p-Aminoacetanilide, frt, alld	lb	1.57	—
Aminoazotoluene base, bbls., 100% basis	lb	1.03	1.18
Aminoethyl ethanolamine, dms., c.l., dlvd	lb	.475	—
l.c.l., dlvd	lb	.485	—
tanks, dlvd	lb	45	—
2-Amino-2 methyl-1-propanol, dms., c.l., frt. alld	lb	44	—
l.c.l. frt alld	lb	45	—
tanks, frt alld	lb	42	—
m-Aminophenol dist. dms., n lots	lb	2.05	—
smaller lots	lb	2.50	—
p-Aminophenol, dms., frt alld	lb	1.15	—
Aminophylline USP 100-lb dms	lb	3.35	—
Ammonia, anhyd., fertilizer, tanks, works, frt. equald	ton	75.00	—
refrigeration tanks works, frt equald	ton	82.50	—
aqueous tanks, works, anhyd basis	ton	83.00	—
Ammoniacal liquor (see Ammonia aqueous)			
Ammoniac sal gray, bgs., c.l., works, frt. equald 100 lbs.		8.25	—
l.c.l., same basis 100 lbs.		9.25	—
white (see Ammonium chloride tech.)			
Ammonium acetate, purif., dms	lb	.41	—
Benzoate USP dms., kgs. 4,000-lb. lots frt alld	lb	.80	—
smaller lots frt alld	lb	.81	1.08
Biborate gran. dms. c.l. works	ton	319.50	—
ton lots, ex whse	ton	397.00	—
smaller lots, ex whse	ton	402.00	—
Bicarbonate, dom., dms., c.l., works 100 lbs.		7.00	—
l.c.l., works 100 lbs.		9.00	—
Bichromate, dms., works	lb	.42	.43
Ammonium bifluoride, dms., dlvd.	lb	.2145	.2245
Bromide, NF gran., bbls	lb	.43	—
Powdered ammonium bromide 10c per lb higher.			
Carbonate, USP, lump, dms.	lb	.16	—
Chloride, tech., fine gran., bgs., c.l., works 100 lbs.		5.75	—
l.c.l., works 100 lbs.		7.75	8.20
USP gran. bbls., dms	lb	.17¼	—
Citrate, dibasic, bbls	lb	.77	—
Dichromate (see Ammonium bichromate)			
Fluoride (see Ammonium bifluoride).			
Hydroxide (see Ammonia accueous).			
Hypophosphite, NF, dms.	lb	3.07	—
Iodide, NF dms., bots	lb	4.26	4.38
Linoleate 80% dms. works	lb	50	55
Nitrate dom., fert. grade, 33.5% N., bgs., western works, frt. equald, base price	ton	64.00	—
imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $8 per ton, base price	ton	64.00	—
August discount	ton	5.00	—
western, bgs., c.l., f.o.b cars, Los Angeles	ton	79.69	—
with dolomite, 20.5% N, bgs., Hopewell, Va	ton	51.00	—
Oxalate fine gran dms	lb	26½	31
Pentaborate, gran., bgs., c.l., works	ton	187.50	—
ton lots, ex whse	ton	273.50	—
smaller lots, ex whse	ton	278.50	—
Ammonium pentaborate powder $10 per ton higher			
Persulfate kgs	lb	.38	47½
Phosphate coml. bgs. c.l., works, frt equald	lb	nom	—
l.c.l., same basis	lb	.10	—
Ammonium phosphate, dibasic, NF, V bbls., dms	lb	.46	—
tech. bgs c.l. works, frt. equald	lb	.09¼	—
l.c.l., same basis	lb	.10	—
Salicylate, NF, dms., kgs.	lb	1.62	1.64
Silicofluoride dms. works	lb	11¾	13¼
Sulfamate, bgs. c.l., t.l., works	lb	18	—
l.c.l. works	lb	22	—
Sulfate, coke-oven, bulk, producing ovens, base price	ton	32.00	—
syn. bulk c.l. f.o.b. works	ton	32.00	42.00
purif., dms., works	lb	.10	.10½
Sulfide liq. 40-44%, tanks frt. equald. 100% basis	ton	160.00	—
Sulfocyanide tech (see Ammonium thiocyanate)			
Thiocyanate tech. dms., c.l., works	lb	.20	—
l.c.l. works	lb	.22	.26
Thioglycollate, coml., cbys., 100% basis	lb	1.35	1.65
highly purif., cbys., 100% basis.	lb	1.70	1.96
Thiosulfate, cryst., photo grade, fib dms. frt alld	lb	.65	—
d-Amphetamine hydrochloride di-basic bots	lb	28.00	—
dl dms	lb	6.00	—
d-monobasic bots	lb	28.00	—
d-Phosphate, dibasic, bots	lb	28.00	—
dl dms	lb	6.00	—
d-Sulfate, dms	lb	28.00	—
dl dms	lb	6.00	—

Amyl acetate ex fusel oil, tech., dms c.l. frt alld E of Rockies	lb	18	—
l.c.l. same basis	lb	19	—
tanks same basis	lb	15½	—
ex pentane reg. dms. c.l. dlvd.	lb	.18½	—
l.c.l., dlvd	lb	.19½	—
tanks, dlvd	lb	16	—
tech., dms., c.l. dlvd	lb	.16½	—
l.c.l., dlvd	lb	.17½	—
tanks, dlvd	lb	.14	—
syn., oxo process, dms., c.l., dlvd	lb	.19¾	—
l.c.l. dlvd	lb	.20¾	—
tanks, dlvd	lb	.18	—
Alcohol (see Alcohol, amyl).			
n-Butyrate dms	lb	1.00	1.25
Cinnamic, aldenyde, dms	lb	1.70	2.20
Nitrite USP bots	lb	1.75	1.83
Salicylate, cns, dms	lb	.82	1.10
o-tert-Amyl phenol, dms., c.l., works.	lb	49½	—
l.c.l. works	lb	50½	—
tanks, works	lb	47	—
p-tert-Amyl phenol, dms., c.l., works.	lb	26¾	—
l.c.l. works	lb	.27¾	—
tanks, works	lb	25¾	—
Anethole, NF cns. dms	lb	1.60	1.80
tech. dms	lb	1.10	1.15
Angelica root, dom., bls	lb	.80	.90
Aniline oil, cms., c.l. frt. alld	lb	.22	—
l.c.l., frt alld	lb	.23	—
tanks, frt alld	lb	.21	—
tankwagons min 2,000 gals	lb	21½	—
Salt dms c.l. truckloads 20,000 lbs., min. frt. alld	lb	.33	—
l.c.l., same basis	lb	.35	—
Anise seed, Mexican, bgs	lb	.25	—
Spanish, bgs	lb	.25	—
Syrian, bgs	lb	.25	—
Anisic aldehyde bots., dms	lb	1.95	2.70
o-Anisidine dms c.l. frt alld	lb	80	—
l.c.l. same basis	lb	.82	—
tanks, same basis	lb	.78	—
p-Anisidine dms works	lb	97	—
Annatto seed whole bgs	lb	15	17
Anthracene 90-95% bbls. ton-lots, works	lb	.83	—
smaller lots works	lb	.95	—
Anthraquinone 99.5% bbls c.l. frt. alld	lb	.83	—
l.c.l., same basis	lb	.86	—
electrical grade bbls. l.c.l. same basis	lb	.91	—
Antimony butter (see Antimony trichloride)			
Metal bulk c.l. mines	lb	.33	—
cs. c.l. mines	lb	.33½	—
Oxide, bgs., c.l., frt. alld	lb	.27	—
l.c.l. frt alld	lb	.28½	—
Sulfide approx 65% bgs. dlvd	lb	.23	.26
Trichloride anhyd, solid, pails, c.l., works	lb	.41	—
l.c.l., works	lb	.43	—
Antimony potassium tartrate tech. powd., dms	lb	.69½	.74½
USP, powd., dms	lb	.74½	.75½
Antipyrine NF 200-lb bbls	lb	3.50	—
Apomorphine hydrochloride USP 25 oz. lots	oz.	5.60	—
Areca nuts, powd., bbls	lb	.13	—
Arecoline hydrobromide NF, bots tins	oz	4.50	6.00
l-Arginine monohydrochloride, dms 1 kilo lots	kilo	74.80	—
Arnica flowers (true montana) bls	lb	2.25	—
Arsenic metal lump bbls ex whse	lb	.54	—
Trioxide USP dms	lb	.48	—
White, powd bbls c.l. dlvd	lb	.05½	—
l.c.l. dlvd	lb	.07½	.07¾
Asafetida cn	lb	.40	—
powd., bbls., dms	lb	.85	—
Asbestine (see Talc, fibrous N. Y.)			
Asbestos Canadian crude No. 1, c.l. (20 tons) mines	ton	1,400.00	—
No. 2, c.l. (20 tons), mines	ton	750.00	—
Run of mine c.l. (20 tons) mines	ton	611.60	—
3K, c.l. (20 tons), mines	ton	261.00	—
3R, c.l., (20 tons) mines	ton	408.10	—
3T, c.l. (20 tons), mines	ton	232.80	—
3Z, c.l. (20 tons) mines	ton	353.70	—
4K, c.l. (20 tons), mines	ton	190.20	—
4M, c.l. (20 tons), mines	ton	190.30	—
4T, c.l., (20 tons), mines	ton	171.60	—
4Z, c.l. (20 tons) mines	ton	171.60	—
5D, c.l. (20 tons), mines	ton	133.70	—
5K, c.l. (20 tons), mines	ton	154.00	—
5M, c.l. (20 tons) mines	ton	122.35	—
5R, c.l. (20 tons), mines	ton	113.20	—
6D, c.l. (20 tons), mines	ton	82.00	—
7D, c.l. (20 tons), mines	ton	72.00	—
7F, c.l. (20 tons), mines	ton	68.25	—
7H, c.l. (20 tons) mines	ton	58.50	—
7K, c.l. (20 tons), mines	ton	48.20	—
7M, c.l., (20 tons), mines	ton	42.90	—
7R, c.l. (20 tons), mines	ton	41.70	—
7RF c.l. (20 tons) mines	ton	42.00	—
7T, c.l., (20 tons), mines	ton	39.00	—
7TF c.l. (20 tons), mines	ton	42.00	—
8S, c.l. (20 tons) mines	ton	28.35	—

Asbestos c.l. prices are in U. S. funds. t.c.l. lots $4 per ton higher

Asphalt gilsonite black jet, bgs c.l. mines	ton	37.00	—
select 350° F. fusing pt. bgs c.l. mines	ton	35.00	—
270-295° F. fusing pt., bgs c.l., mines	ton	37.00	—
seconds 300-390° F. fusing pt. bgs. c.l., mines	ton	32.00	—
Manjak, No. 10, crude, dms., works	lb	.66¼	—
Petroleum, cut-back, tanks, tankwagon, refy	gal	.09	—
emulsion tanks tankwagon refy	gal	.09½	—
steam refd., 50-80 penetration tanks tankwagon refy	ton	21.00	—
85-300 penetration tanks tank wagon refy	ton	20.00	—
Aspirin (see Acid acetylsalicylic)			
Atropine, USP, bots	oz.	3.90	4.50
Sulfate, USP, bots	oz.	2.25	2.63

B

Bacitracin bulk 1,000,000,000 or more units	50,000 units	70	—
less than 1,000,000,000 units	50,000 units	75	—
Balm of Gilead buds, dried bgs	lb	1.35	1.45
Barberry root bark, bgs	lb	.28	.31
Barbital, NF, 100-lb. dms	lb.	4.50	—
Sodium, NF, dms	lb.	4.75	—
Barium carbonate precip., bgs. c.l. works	ton	100.00	—
smaller lots, works	ton	110.00	—
Chlorate kgs. works	lb	.32	.36
t.c.l. t.l.l. frt equald	ton	285.00	—
Chloride anhyd. bgs. c.l. works	ton	165.00	—
t.c.l. works	ton	175.00	—
NF, cryst., 100 lb. dm	lb.	.22	—
tech., cryst. bgs., c.l., works 100 lbs		6.50	—
t.c.l., works 100 lbs		7.00	—
Chromate, bgs. frt. equald	lb.	.45	—
Dioxide (see Barium peroxide).			

1 mg. of well-being

Tensions disappear miraculously. Optimism replaces anxieties. These are the results commonly achieved with Reserpine in mental and hypertensive disorders.

A prime producer of Reserpine, Penick has developed other special Rauwolfia alkaloids, Rauserfia and Raunormine. With Verabore (special amorphous alkaloids of Veratrum Viride) and Protobore (protoveratrines A and B), these are among the highly purified extractives made in our versatile plants.

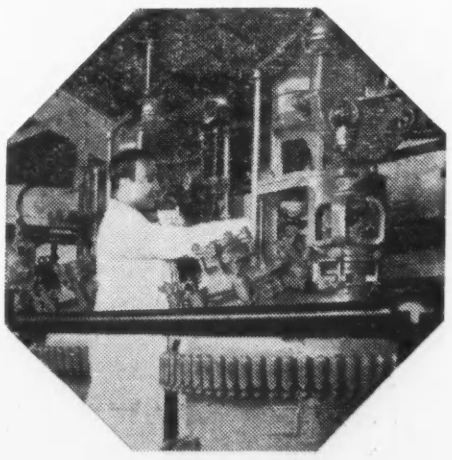
Fact is, the best source for *any* extract or alkaloid is Penick! We have over 40 years experience in extracting the useful elements in plants. Variety of equipment enables us to "tailor" the process to protect the natural values of a specific botanical. And, with the world's biggest stock of botanicals, we serve the widest range of extractives to the greatest number of users in the pharmaceutical, food, beverage, dairy, textile and photographic industries.

This is just one facet of the many-sided Penick story . . . a story of service to users of antibiotics, aromatic compounds, flavors, gums, spices, pharmaceutical and agricultural chemicals*. If you are not fully familiar with Penick's part in *your* industry, we should be happy to discuss it with you.

**Many more fine chemicals are available from our affiliate, The New York Quinine & Chemical Works, Inc.*

PENICK

Manufacturers of Fine Chemicals and Drugs



Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton 208.00 - —
l.c.l., l.t.l., frt. equald ton 218.00 - —
Monoxide (see Oxide).
Nitrate, bbls., c.l., t.l., dlvd lb .16 - —
l.c.l., l.t.l. dlvd lb .17 - —
Oxide, grd. dms., c.l., t.l., frt equald ton 275.00 - —
Peroxide dms. frt equald lb .20 - —
Stearate ctns., c.l., frt alld lb .39 - —
l.c.l., same basis lb .40 - .44
Sulfate, tech. (see Barytes and blanc fixe).
X-ray dms lb .15 - .15½
Sulfide, dms., c.l., works ton 85.00 - —
l.c.l. works ton 95.00 - —

Barytes, Southern, off-color, bgs., mines ton 25.00 - —
95 75% bgs. mines ton 25.00 - —
water-grd. paper bgs., c.l., St Louis ton 49.00 - —
ex-whse. N. Y. ton 70.85 - —

Bauxite, bulk mines ton 6.75 - 10.00
Bay leaves (see Laurel leaves)
Belladonna leaf bls lb .35 - .37
root, bls lb .45 - .50
Bentonite dom. 200 mesh, bgs. c.l. mines ton 14.00 - —
imp Italian white high gel. bgs. 5-ton lots, ex whse ton 84.00 - —
1 ton lots, ex whse ton 87.00 - —
low gel. bgs., 5-ton lots, ex whse ton 82.35 - —
1 ton lots ex whse ton 85.25 - —

Benzal chloride, chys., works lb .44 - —
Benzaldehyde NF dms lb .74 - 1.05
tech., chys., dms., t.l. lb .43 - —
smaller lots lb .44 - —

Benzene (See Benzol).
Hexachloride, 25% and 99% gamma isomer (see Lindane)
tech., high gamma dms., c.l., dlvd., gamma unit-lb. .0075- .008
l.c.l., works, gamma unit-lb. .009 .0095
low gamma, dms., c.l. dlvd.., gamma unit-lb. .0075- —
l.c.l. works, gamma unit-lb. .009 —

Benzidine hydrochloride, bbls. c.l., frt. alld., 100% basis lb. 1.19 - —
l.c.l., same basis lb. 1.21 - —
Sulfate tech frt alld., 100% basis lb. 1.21 - —

Benzocaine dms lb 3.48 3.50

Benzol, coaltar, pure or nitration tanks works:—
Bethlehem Pa gal .36 - —
Birmingham district gal .36 - —
Chicago district gal .36 - —
Cleveland district gal .36 - —
Geneva Utah gal .36 - —
Johnstown Pa. gal .36 - —
Lackawanna N Y. gal .36 - —
Lone Star, Texas gal .36 - —
Lorain Ohio gal .36 - —
Middletown Ohio gal .36 - —
Minnequa Colo gal .36 - —
Philadelphia district gal .36 - —
Pittsburgh district gal .36 - —
Sparrows Point Md gal .36 - —
Syracuse N Y gal .36 - —
Terre Haute Ind gal .36 - —
Youngstown Ohio gal .36 - —

Benzophenone dms lb 1.40 1.70

Benzotriazole tech dms., 1,000-lb lots, works lb 2.25 - —

Benzotrichloride chys., 1,000-lb lots or more, frt equald lb .18 - —
smaller lots frt equald lb .20 - —

Benzoyl chloride chys. dms., c.l., works frt equald lb .21 - —
l.c.l. same basis lb .23 - —
tank trucks, dlvd Metropolitan area lb. .21 - —

Peroxide, purit. fib dms., 50 to 1,000-lb lots works lb .98 1.08

Benzyl acetate f.f.c., cns., dms lb. .60 1.00
Alcohol (see Alcohol benzyl)
Benzoate, NF, f.f.c., 500 lb. dms. lb .62 - —
Chloride, tech., 13-gal. chys., dms., c.l., works, frt, equald. lb. .23 - —
l.c.l. same basis lb. .24 - —
tank trucks, dlvd Metropolitan area lb. .21 - —

A 2½c differential is quoted on benzyl chloride in 5-gal chys. In steel dms prices were ½c lower

Cinnamate, cns. lb 3.60 - 3.90
Formate, cns lb 1.80 2.10
Isoeugenol, cns lb 9.85 - —
Propionate bots. lb 1.35 - 1.65
Salicylate bots. lb. 1.60 - 1.85

Benzylidine acetone, bots lb. 1.75 1.80
Chloride (see Benzal chloride)

Berberine bisulfate cns lb 35.00 - 36.25
Hydrochloride bots lb 35.00 - 36.25

Betaine, anhyd., 10,000-lb. lots, frt. alld lb. 3.00 - —
Hydrochloride, 5,000-lb. lots, frt. alld lb. 1.60 - —
Monohydrate, 10,000-lb. lots, frt. alld lb. 2.60 - —

Betagammapicoline (see b,g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine)
Betaphenylethylamine (see b-Phenylethylamine)
BHC (see Benzene hexachloride technical)
Biotin cryst. bots gram 10.00 - —
Biphenyl (see Diphenyl).

Bismuth chloride cars lb 5.11 - —
Hydroxide dms lb 4.65 - —
Metal, bxs, ton lots lb 2.25 - —
Nitrate, cryst., dms. lb 2.10 - 2.17
Oxide, anhyd., dms lb 4.47 5.05
Oxychloride, dms lb 4.37 4.42
Phenolsulfonate fib dms lb 5.22 - —
Subcarbonate, USP, dms. lb 3.20 - —
Subgallate, NF, fib. dms. lb. 3.15 - —
Subiodide fib. dms lb 5.37 - —
Subnitrate NF, dms lb 2.65 - —
Subsalicylate USP dms lb 3.50 - —

Bismuth-ammonium citrate, USP, powd jars lb 4.22 - —

Bisphenol-A, c.l., t.l., frt. alld lb. 29¾ - —
l.c.l., same basis lb. 30¾ - —

Black acetylene imp., bgs., c.l., duty and freight extra lb. .17 - —
cs., l.c.l., ex whse lb. .22½ - .26

Ash (see Barium sulfide)
Bone, dms. l.c.l. frt alld lb. .17 .23¼
Pacific coast bone black prices 2c per lb. higher

Carbon, channel, pigment, high color beads, ctns., c.l., works. lb. .72 - —
l.c.l. dlvd or whse. lb. .78 - —
medium color, uncompressed bgs. c.l., works. lb. .12 - —
l.c.l. dlvd or whse. lb. .19 - —
rubber, beads, bulk, c.l., works lb. .07 - —
bgs. c.l., works lb. .074 - —
l.c.l., works lb. .1225 - —

Black, carbon, furnace, fast extruding, bgs., c.l., works. lb. .06 - —
ctns., l.c.l. whse lb 10 - —
high abrasion, bulk c.l. works. lb .0750- —
bgs., c.l. works lb .0790- —
l.c.l., dlvd or whse lb. .122 125
high modulus, bgs., c.l., works. lb. .0550- —
ctns. l.c.l. whse lb .0950- —
semi-reinforcing bgs. c.l., works lb .045 —
bgs. ctns. l.c.l. whse lb .085 —
Charcoal (see C).
Dyes (see Dyes).
Graphite (see G).

Iron oxide, pure bgs. c.l. works. lb. .13¼ —
l.c.l. works lb .13½ —
Lamp bgs., c.l. works lb. .16 45
Mineral bgs., works lb. .0160- .0675

Blackberry root bark bls lb .45 —
Black haw root bark, bls lb .63 .65
tree bark, bls lb. .45 - .50

Blanc fixe dry byproduct, bgs. c.l. works ton 190.00 —
l.c.l. works ton 200.00 —
direct process bgs. c.l. works ton 110.00 —
l.c.l. works ton 120.00 —
N. Y. whse ton 155.00 —

Blood, dried, 16-16½% ammonia, unit-ton. 5.25 - —
high grade, unground, 16-17% ammonia bgs. Chicago unit-ton. 5.00 - —

Blood, dried, soluble, bgs., c.l. lb. .13 - .14
t.l. lb. .15 - .17
l.t.l. lb. .15½ - .35½

Bloodroot bls lb .48 .50

Blue alkali, dry, 250-lb bbls., dlvd. N of Tenn. and N C., E. of Miss R including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb 2.10 - —
toner, litho flushed, 125-lb. bbls., same basis lb 1.20 - —
Chinese, bbls., c.l., same basis lb. .50 - —
l.c.l., ton lots, same basis lb. .51 - —
smaller lots, same basis lb. .52 - —
Cobalt, genuine bbls., same basis. lb 4.90 - —
Imitation (see Blue, ultramarine).
Dyes (see Dyes).
Iron (see Blue, Chinese Milori, Potash Prussian and Soda).
Methyl, violet toner, molybdated, PMA, bbls., same basis lb. 2.75 - —
tungstated, PTMA, bbls., same basis lb. 4.00 - 4.15
Milori, bbls., c.l., same basis lb. .50 - .55
l.c.l., ton lots, same basis lb. .51 - .56
smaller lots, same basis lb. .52 - .57
Peacock, fugitive, 100% color strength, bbls. same basis. lb. .45 - —
Phthalocyanine, full strength, bbls., same basis lb. 3.45 - —
resinated, bbls., same basis lb 3.00 - —
water dispersable, bbls., same basis lb. 1.54 - —
Potash, CP, bbls., same basis lb. .56 - —
Prussian, insoluble, soluble, bbls., c.l., same basis lb. .50 - —
l.c.l. ton lots, same basis lb. .51 - —
smaller lots, same basis lb. .52 - —

Blue, soda, CP, bronze, bbls., c.l., same basis lb. .50 - —
l.c.l., ton lots same basis. lb. .51 - —
smaller lots same basis. lb. .52 —

Ultramarine, cobalt type, dry or pulp, bbls., same basis lb. 39½ - .35
jobbing types, bbls. same basis. lb. .19 —
regular types dry bbls., same basis lb. .22½ .35

Victoria toner, molybdated, PMA, bbls lb 4.10 —
tungstated, PTMA bbls lb 5.35 —

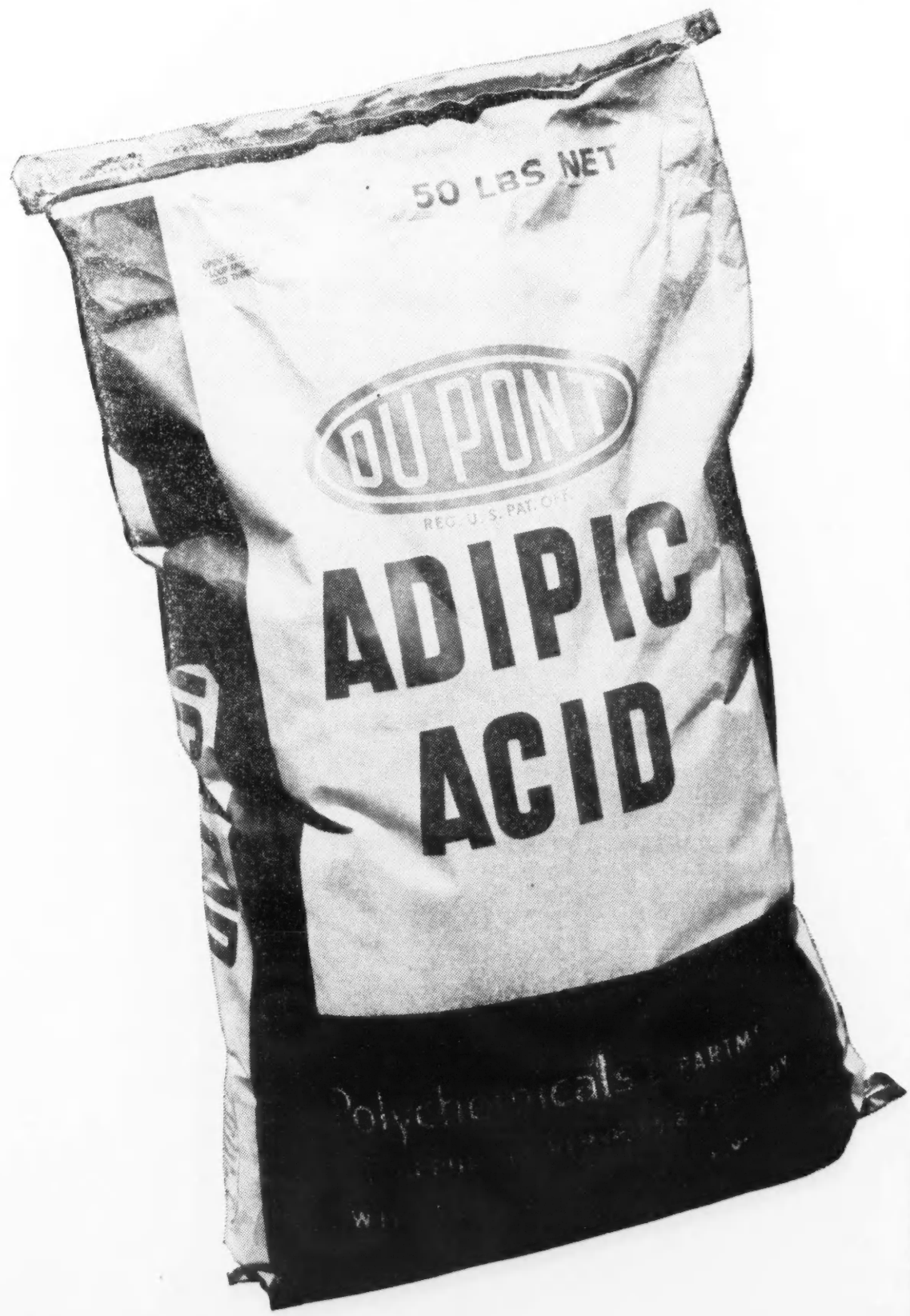
Blue dry colors, dlvd prices ½c higher Ala., Fla., Ga., La (Shreveport 1½c.), Miss., N C., S C., Tenn. Tex (El Paso 2c), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1 6c higher Pac. Coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago

Blue vitriol (see Copper sulfate).
Bluestone (see Copper sulfate).

Bonemeal, steamed, works, E ton 60.00 - —
Los Angeles ton 82.50 - —

Bone phosphate, defluorinated (see D) of lime (see Calcium phosphate, tribasic).
precipitated (see Calcium phosphate tribasic, NF precip.)

Borax, tech., anhyd., 99%, bgs., c.l., works ton 80.50 - —
ton lots ex whse, N. Y. or Chi ton 132.25 - —
smaller lots, works ton 137.25 - —
bulk, c.l., works ton 71.50 - —
cryst., 99½%, bgs., c.l., works. ton 69.25 - —
ton lots ex whse, N. Y. or Chi ton 121.00 - —
smaller lots, same basis. ton 126.00 - —



Borax, tech., decahydrate, 99½%, gran., bgs., c.l., works ton 43.25 - —
ton lots ex whse. N. Y., Chi ton 95.00 - —
smaller lots, same basis, ton 100.00 - —
bulk, c.l., works ton 36.75 - —
Pentahydrate, 99%, gran., bgs., c.l., works ton 57.75 - —
ton lots ex whse N. Y., ton 109.50 - —
smaller lots, same basis, ton 114.50 - —
bulk, c.l., works ton 51.50 - —
powd., bgs., c.l., works, ton 48.25 - —
ton lots ex whse N. Y., or Chi ton 100.00 - —
smaller lots, same basis, ton 105.00 - —
USP borax $15 per ton higher.

Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse. pt. lb. .18 - .24
l.c.l., same basis lb. .19 .26
Borneol, cns lb 2.50 4.5
Boron trifluoride gas, cyls., truckload, works lb. .62 - —
l.t.l. works lb. .70 - —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies lb. .32 - —
l.c.l., same basis lb. .34 - .39
ret. dms., c.l., t.l. dlvd E of Rockies lb. .31 - —
l.c.l., same basis lb. .31 - .33
tanks, same basis lb .22½ - —
Bromochloromethane. dms., c.l., frt. equald lb. .48 - —
l.c.l., same basis lb. .50 - —

Bromoform, pharmaceutical grade, bots lb. 1.62 - 2.60
cbys. lb. 1.52 - —
Bromstyrol, bots lb. 5.40 5.70
Bronze powder aluminum (see A).
Brown iron oxide pure bgs., c.l., works lb. .14¼ - —
l.c.l., works lb. .14½ - —
Oxide, metallic bgs., works lb. .04 - —
Sienna burnt, paper bgs., c.l., works lb. .06¼ .17¼
l.c.l., works lb. .06½ .17½
raw, paper bgs., c.l., works lb. .06¼ .16¼
l.c.l., works lb. .06½ .16½
Umber, burnt, American, c.l., works. lb. .07 - .07¾
l.c.l., works lb. .07¼ .08
Turkey type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee Va. N. Y lb. .07¾ —
raw, American bgs., works lb. .07½ - .08¼
Turkey-type bgs. works lb. .06¾ .07
Vandyke bbls., works lb. 09½ .12
Brucine, cns., 100-oz. lots oz. 20 .25
Sulfate NF cns. 100-oz lots oz. .15 .20
Buchu leaves, bls lb. 1.30 - —
Butadiene, refd. cyls., c.l. refy lb .21 - —
l.c.l. refy lb. .22 - —
tanks refy lb 15 - —
Butane, indust. tanks group 3 gal 04½ - —
n-Butyl acetate ferment. dms., c.l., frt. alld lb. .16½ - —
l.c.l., same basis lb. .17½ - —
tanks, same basis lb. .14 - —
syn., dms., c.l., dlvd. E lb. .16½ - —
l.c.l., same basis lb. .17½ - —
tanks, same basis lb. .14 - —
sec-Butyl acetate syn. dms., c.l., dlvd. E lb. .13½ - —
l.c.l., same basis lb. .14¼ - —
tanks, same basis lb. .11¾ - —

Butyl alcohol (see Alcohol, n-Butyl).
Aldehyde (see Butyraldehyde).
Chloride dms., c.l. works lb. .37½ - —
l.c.l., works lb. .38¼ - —
Ether, dms. c.l. works lb. .33 - —
l.c.l. works lb. .33¾ - —
tanks, works lb. .31 - —
Lactate, dms., c.l., frt. alld. E. of Rockies lb. .42½ - —
l.c.l. same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Laurate, dms. works lb. .39 - —
Methacrylate dms. c.l. t.l. works, lb. .55 - —
l.c.l. works lb. .55½ - —
Oleate, refd., dms., l.c.l., works. lb. .32 - —
Phenylacetate, dms lb. 4.50 4.60
Phthalate (se Dibutyl phthalate).
Stearate dms. c.l., frt. equald, l.c.l., same basis lb. .26½ - —
Butylamine (see mono- di- and tri-). lb. .25 - —
6-tert-Butyl-m-cresol, dms., c.l., works lb. .55 - —
l.c.l. works lb. .56 - —
tanks, works lb .54 - —
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p cresol)
p-tert-Butylphenol bgs. c.l. works. lb. .27½ - —
l.c.l. lb. .28½ - —
Butyraldehyde, dms., c.l. dlvd lb. .22 - —
l.c.l., dlvd lb. .23 - —
tanks, dlvd lb .19½ - —
Butyric ether (see Ethyl butyrate)

C

Cacao butter (see Cocoa butter)
Cadmium iodide 25 lb fib dms lb 6 75 7 00
Metal ingots or sticks, cs. dlvd lb 1 70 —
Caffeine, USP, nat., cryst., anhyd., dms., 100 lb lots or more lb 3 00 —
hydrous dms 100-lb lots or more lb 2 80 —
syn., cryst., anhyd., dms., 100-lb. lots or more lb 3.00 - —
hydrous 100 lb lots or more lb 2 80 —
Citrated USP dms 100-lb lots or more lb 2 70 —
Calamine, USP, dms lb. .34 - —
Calciferol, cryst. vials, 1-kilo lots, works gram .60 —
25 to 100 gram lots works gram .65 —
In edible oil (see Viosterol)
Calcium p-aminosalicylate, fib dms., 100 lbs or more frt adjusted lb 4 00 —
Arsenate dealers bgs c.l., frt alld lb 09 09½
Bromide NF 100 lbs or more lb 92 —
Carbide, standard generator size, dms., c.l., dlvd ton 134.40 - —
Carbonate, nat., dry-grd. air floated, 325 mesh bgs., c.l., works ton 10.50 —
chalk cutting 325 mesh bgs., c.l., works ton 32 00 34.00
l.c.l., same basis lb. 10 - .10½
water-grd. ½ to 10 microns bgs., c.l. works ton 30 00 —
10 to 20 microns, bgs. c.l., works ton 17 00 18 00
precip. dense bgs. c.l. works ton 32 50 —
l.c.l. works ton 42 50 —
medium bgs. c.l. works ton 38 00 —
l.c.l. works ton 48 00 —
surface treated bgs., c.l. works ton 37 50 —
l.c.l. works ton 47 50 —
ultrafine, bgs., c.l., works. ton 110.00 160.00
l.c.l. works ton 120 00 175 00
Chloride cryst. purif. dms lb 27 —
flake 77-80% paper bgs. c.l. works frt equald ton 29 00 —
liquor, 40% tanks frt equald. ton 12.35 —
pellets bgs. c.l. works ton 35 40 —
powd., bgs., c.l., works ton 35.00 —
solid 75-75% dms. c.l., frt equald ton 27 50 —
l.c.l. works frt equald ton 34.00 71 00
USP gran dms lb 32 —
Chromate, bgs., frt. equald lb. .29½ 30
Cyanide dms c.l., dlvd. E. of Rockies lb 20 —
l.c.l. same basis lb 24 55
Cyclamate, 100-lb fib. dms lb 2.95 —
Gluconate, AA, bbls., dms lb. 74 76
USP bbls. dms lb 67 69
Hydride, dms., works lb 2.15 3.00
Hypochlorite, high test, 45-lb cs., dlvd. E. of Rockies cs. 22.95 25 10
100-lb. dms., same basis dm. 30.80 34.50
Hypophosphite dms. ton lots or less lb 90 93
Iodide tars lb 4.52 —
Lactate NF dms. 10,000-lb lots or more works lb .36 40
Mandelate USP dms. works lb 2.10 2.25
smaller lots works lb 41 48
Naphthenate liq. 4% Ca. dms., frt equald lb .27¼ —
Nitrate fertilizer grade bgs. c.l. Los Angeles ton 46 00 —
tech., 5-dm lots, works lb 13 - —
Pantothenate, dms., bots., frt. adjusted gram .045 —
Para-aminosalicylate (see Calcium p-Aminosalicylate)
Phenolsulfonate dms lb 70 —
Phosphate, dibasic, USP, bgs., c.l., frt. equald 100 lbs. 7.75 - —
l.c.l. frt equald 100 lbs 8 50 —
feed grade 18½-23% P bgs. c.l., t.l. frt equald ton 79 55 83 25
l.c.l., frt equald ton 89 55 93 25
21% P. bgs., c.l. t.l., frt equald ton 94 50 —
l.c.l. frt equald ton 99 50 104 50
monobasic bgs. 10,000-lb lots, frt. equald 100 lbs 6.90 —
smaller lots same basis, 100 lbs 7 40 —
tribasic, NF precip., bgs., c.l., works frt equald 100 lbs 8.75 - —
l.c.l. frt equald 100 lbs 9 00 —
Phytate, bgs., works lb. .50 - —
Resinate precip dms. frt. alld., works lb. 30½ —
Silicate, hydrated bgs. c.l., works. lb. .06 - —
l.c.l. works lb 06½ —
paint grade (see Wollastonite)
Stearate ctns. c.l lb .37 —
l.c.l lb 38 42
Sulfate (see Gypsum)
Calomel, USP, powd., dms lb. 5.42 - —
Camphene 46 m.p. dms. incl. c.l., works lb 15 —
l.c.l. same basis lb 16½ —
tanks same basis lb 12½ —
Chlorinated 67-69% (see Toxaphene)
Camphor monobromated NF, dms kgs lb. 3.50 - —
nat. USP powd. cs 100-lb lots lb 60 65
tablets 1-oz. ½-oz cs lb 85 90
syn., tech., 1 bbls or more lb. .48 - —
USP gran. powd. bbls., 2,000-lb lots lb 59 —
1,000-lb lots lb 60 —
smaller lots lb 61 —
tablets tins 2,000-lb lots lb 90 —
1,000-lb lots lb 91 —
smaller lots lb 92 —
Canada balsam (see Fir balsam)
Cantharides, Chinese cs lb 2.00 2 05
powd. bxs lb 2.25 2 30
Russian, bgs lb 4.00 4 05
powd. bxs lb 4.35 4.40
Capsicum (see Pepper, red).
Oleoresin NF from domestic pepper, dms lb 4.50 5 25
from African pepper, dms lb 4.35 5 00
Caraway seed, Dutch, bgs. lb. .17 —
Carbazole 97% bbls. ton lots, works lb 1.05 —
Carbon black (see Black, Carbon).
Dioxide, indust., wholesale, bulk, dlvd. Metropolitan area ton. 73.00 115.00
cyls. same basis lb .08 09
solid, same basis lb. .035 040
Disulfide, 55-gal. dms. c.l., works, frt. equald to competitive points lb. .07 —
l.c.l. same basis lb 08½ 09
5-gal. dms. 30 dms to c.l., same basis lb 13 —
less than 30 dms lb 16 —
tanks, dlvd lb 0545 —

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You get unvarying high quality in every bag of Du Pont Adipic Acid

Du Pont, the chemical industry's first producer of adipic acid, maintains its high-quality standards with the latest manufacturing processes and production techniques.

You benefit from Du Pont's 20 years of experience as a producer of high-quality adipic acid. For shipment after shipment, you can depend on a product that meets your most exacting specifications . . . whose purity and uniformity are always the same. This means you can count on a smoother-running operation . . . with costly production halts cut to a minimum.

What's more, uses for versatile Du Pont Adipic Acid continue to grow. In addition to applications in many phases of petroleum and chemical manufacture, Du Pont Adipic Acid is widely used in the production of high-quality adipate plasticizers, polyester resins, and polyurethane foams.

If adipic acid is an ingredient in your process, consider the many advantages you gain from Du Pont's experience in producing this basic chemical. Remember, too, that there is a strategically located stock point near your plant ready to ship Du Pont Adipic Acid (packaged in 50-lb. multi-ply paper bags) on receipt of your order. For more information, call or write our nearest district office . . . you will receive a prompt response.

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Tel: Longacre 3-6400

Chicago 30, Illinois
7250 N. Cicero Ave., Lincolnwood
Tel: Ind. 3-2570

Detroit 35, Michigan
13000 West Seven Mile Road
Tel: Uni. 4-1963

Los Angeles 58, California
2930 East 44th Street
Tel: Cumberland 3-2761

FORMULA:

$(CH_2)_4\ (COOH)_2$

TYPICAL ANALYSIS:

Adipic Acid 99.8%
Ash ..... 5 p.p.m.
Iron ..... 0.5 p.p.m.
Water 0.05%
Color, A.P.H.A. 6

DU PONT
REG. U.S. PAT. OFF.

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POLYCHEMICALS DEPARTMENT

E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware

Carbon Tetrachloride—Coaltar

Carbon tetrachloride, CP, consumers, dms., l.c.l., frt. alld lb. .12¼- .14½
tech. consumers dms. c.l., frt. alld lb. .11¼- —
l.c.l., frt. alld lb. .13½- —
tanks, frt. alld lb. .10 - —
Carboxymethyl cellulose (see CMC).
Carbromal NF dms. 100 lb lots, works lb 4.00 4.25
smaller lots works lb 4.10 4.75
Cardamom seed, bleached "A" lb 3.20 - —
"B" lb 3.10 - —
decorticated, Ceylon, cs lb 3.00 - —
Guatemalan, cs lb. 3.60 - —
green, Alleppey, bgs lb 2.15 - —
Ceylon, bgs lb 2.15 - —
Carmine No 40, NF bulk, 100 lb lots or more, dlvd lb.16.80 - —
smaller lots, dlvd lb.16.90 -17.30
Carotene tech., 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd gram. 295 - —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. 12 - —
microcrystalline in oil, 400,000 A units per gram dms. dlvd. million units. .21 - —
b-Carotene, pure crystalline, 1,600,000 A units to 1,670,000 per gram., cns gram. .35 - —
in vegetable oil, 400,000 A units per gram cns. gram. .084 - —
Carvol, bots lb 4.50 8.00
Cascara sagrada bark, bulk lb. .33 - —
Casein dom. acid precip., standard, bgs., 10,000 lb lots or more, shipt point lb. .32 Nom.
premium bgs., 10,000-lb. lots or more, shipt. point lb. .38 Nom.
imp., acid-precip., grd., Argentine, bgs., c.l., duty paid lb. .23¼- .24
New Zealand, duty paid lb. .24 .25
Cashewnut shell liquid, treated, dms. c.l., Newark, N J lb .22 - —
ton lots, same basis lb .23 - —
dm. lots same basis lb .25 - —
Cassia, Batavia, "A," bls. lb .22 - —
"B" lb .21 - —
"C" lb .20 - —
Corinje "A" lb. .20½- —
"B" lb. .19½- —
"C" lb. .18 - —
Castor beans, bgs., f.o.b. Brazil ton.175.00 -180.00
Oil (see Oil, castor)
Pomace bgs., c.l., works ton 35.00 -40.00
Castoreum, nat., cns lb 5.25 -30.00
syn. cns lb 9.00 —
Catechol, CP, cryst., fib dms., works lb 2.17½- —
resub., dms. works lb 4.29½- —
Catnip leaves, Southern, bls lb. 75 - —
Celery seed, French, bgs lb. .41 - —
Indian, bgs. lb. .21 - —
Cellulose acetate, flake, powd., ctns., bgs. 100-lb lots or more, dlvd E lb .35 .46
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E lb. .545 - .555
27% butyryl content, bgs., dlvd. E lb. .595 .605
38% butyryl content, bgs., dlvd. E lb. .545 .555
50% butyryl content, bgs., dlvd E lb. .595 .595
half-second, bgs. dlvd E. lb .545 - .555
Scrap (see Pyroxylin scrap).
Cerium chloride, dms., dlvd. lb. .35 - —
Hydrate 74% CeO_2, fib dms., 100-lb lots or more lb 1.44 - —
77% CeO_2 fib dms., 100-lb lots or more lb 1.74 - —
Oxalate, NF, bgs., works lb. 1.00 - —
Oxide, optical grade, bgs., 50-lb lots or more, dlvd lb 1.85 1.98
smaller lots, dlvd lb 2.03 2.23
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian style, cs lb. .85 - .95
Roman, cs. lb. 2.30 - 2.75
Charcoal, activated, NF, fib, dms., c.l., works lb. .25 - .32
5-ton lots, works lb. .26½- .32½
smaller lots works lb. .27 - .50
Bone (see Black, bone)
Hardwood, bulk, lump, c.l., f.o.b. plant ton.55.00 - —
briquets, bulk, c.l., f.o.b. plant ton.75.00 -80.00
5 lb paper bags, c.l., same basis ton.108.00 —
10 lb. paper bags, c.l., same basis ton. 95.00 -98.00
25 lb. paper bags, c.l., same basis ton. 82.00 -88.00
40-lb paper bgs., c.l., same basis ton.81.00 -85.00
Charcoal pinewood, gran., bgs., c.l., works, South ton.57.00 - —
l.c.l., works, South ton 57.00 -67.00
lump, bgs., c.l., works, South ton 53.50 —
l.c.l., works, South ton.56.50 -71.00
bulk, c.l., works, South ton 33.00 —
t.l., works, South ton 41.00 —
Chestnut extract, Italian, solid, 60% tannin, bgs., exdock, plus duty lb. .09½- —
powd., 70% tannin, bgs., exdock, plus duty lb. .10⅜- —
Chloral, tech. 94% min. dms., c.l., works lb. .23 - —
l.c.l., works lb. .24 - —
tanks, multiple units, 5 cars, works lb. .21 —
Hydrate, USP, 40 lb. jars, 1,000-lb. lots lb 1.00 - —
500-lb lots lb 1.03 - —
100-lb. lots or less lb 1.05 - —
Chloramine T, NF, bbls, works lb .75 1.00
Chlordan, agricultural dms. c.l., frt alld lb. .65 —
l.c.l. 5,000 to 10,000-lb. lots, frt alld lb. .66 - —
clarif., dms., c.l., frt alld lb. .69 - —
l.c.l. 5,000 to 10,000-lb. lots, frt alld lb. .70 - —
Chlorinated paraffin, 42%, dms., c.l., frt alld lb. .16¼- —
l.c.l. same basis lb. .17¼- —
70%, dms., c.l., same basis lb. .18¾- —
l.c.l., same basis lb. .19¾- —
Rubber, 5, 10, 20 cps. ctns., c.l., works lb. .55 - —
l.c.l., works lb. .56 - —
125, 1,000 cps., ctns., c.l., works. lb. .65 - —
l.c.l., works lb. .66 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .10¼- —
l.c.l., Metropolitan area lb. .11¾- .13
tanks, single units, works, frt. equald 100 lbs. 3.15 - —
multiple units, 5 cars, works, frt equald 100 lbs. 4.05 - —
3 cars, same basis 100 lbs 4.25 - —
2 cars, same basis 100 lbs 5.25 - —
1 car, same basis 100 lbs. 7.25 - —
4-Chloro-2-aminotoluene fused bbls. lb. 1.45 - —
m-Chloroaniline, dms., min. 10,000 lbs or over, frt alld lb. .75 - —
less than 10,000 lbs., same basis lb. .80 - —
tanks, same basis lb. .73 - —
o-Chloroaniline, dms. c.l., frt. alld. lb. .65 - —
l.c.l., same basis lb. .67 - —
tanks, same basis lb. .63 - —
p-Chloroaniline, dms c.l. frt. alld. lb. .77 - —
l.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works lb. 1.05 - —
l.t.l., works lb. 1.20 - —
p-Chlorobenzaldehyde, dms., c.l., works lb. 1.95 —
Chloroform, tech. dms., c.l. dlvd. E lb. .18 - —
l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms lb. .30 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 - —
powd., dlvd. E., 100% basis lb. .86 - —
4-Chloro-2-nitroaniline, powd. dlvd. E lb. .80 - —
o-Chlorophenol, dms. c.l. frt. equald. lb. .37 - —
l.c.l., same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald. lb. .37 - —
l.c.l., same basis lb. .38 - —
Chloropicrin, coml., bots lb. 1.50 - —
cyls., 130 lbs., frt. alld lb. .95 - —
100 lbs. same basis lb. .97 - —
25 lbs., same basis lb. 1.22 - —
Choline bitartrate, fib, dms., frt. adjusted lb. 1.25 - 1.35
Chloride, fib, dms., frt. adjusted, lb. 1.25 - 1.35
Dihydrogen citrate, fib, dms., frt. adjusted lb. 1.25 - 1.35
Chromium acetate, soln., 7½%, bbls., works lb. .09½- —
cbys., works lb. .11¼- —
Fluoride, bbls., works lb. .51 - .52
Green (see Green, chrome).
Oxide (see Green chromium oxide)
Trioxide, NF, bots lb. .82 - .89
Yellow (see Yellow chrome).
Cinchona bark, NF, red, broken, bgs lb. .35 - .40
yellow, broken, bgs lb. .35 - .40
Cinnamon, Ceylon, No. 2, bgs. lb. .98 - —
"0000," bgs., afloat lb. 1.08 - —
Citral, bots., cns lb. 4.90 - 5.90
Citronellal, bots., dms lb 2.85 - 3.50
Citronellol, bots., dms. lb. 4.30 - 4.60
Civet, artif, bots lb.13.75 -15.00
nat., bots oz. 8.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn ton.19.50 - —
crushed, shed moisture, bulk, c.l., Tenn ton.10.00 - —
purif., bgs., c.l., Tenn ton.20.50 - —
imp., airfloated, bgs., c.l., Atl port long-ton.42.00 -45.00
lump, bulk, Atl port long-ton.27.00 -30.20
China, dom., dry-grd., airfloat, 99% 325 mesh, bgs., c.l., Georgia, works ton.10.00 - —
l.c.l., Georgia, works ton.15.50 - —
300 mesh., bgs., c.l., Georgia, works ton.13.50 -14.50
l.c.l., same basis ton.35.00 -36.00
imp., white, lump, bulk, c.l., ex-dock, Phila., Portland, Me., gross ton.20.00 -35.00
powd., bgs., c.l., ex dock net ton.50.00 - —
l.c.l., ex whse net ton.60.00 -65.00
Clove, Madagascar, bgs lb. .42½- —
Zanzibar, bgs lb. .47 - —
CMC, crude, 96%, low or medium vis., bgs., or fib dms., 23,000 lbs., dlvd E., 100% basis lb. .39½- .41
less than 23,000 lbs., dlvd. E., 100% basis lb. .41½- .43
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .39½- .41
l.c.l., dlvd E. 100% basis. lb. .41½- .43
purif., high vis. (see Gum Cellulose).
standard, low or medium vis., bgs., 23,000 lbs. or over, works, frt. alld lb. .55 - —
smaller lots, same basis lb. .57 - —

CMC prices W of the Rockies are 2c. per lb. lower and are on a works basis.

Coaltar, crude, resale for soins., dms., c.l., ex-whse. gal. .30½- —
l.c.l., ex-whse gal. .33½- —
tanks, ex works gal. .154 - .165
refd., resale, industrial, dms., c.l., ex-whse. gal. .30½- .35
l.c.l., ex-whse gal. .33½- .39
tanks, works gal. .16½- .20⅛

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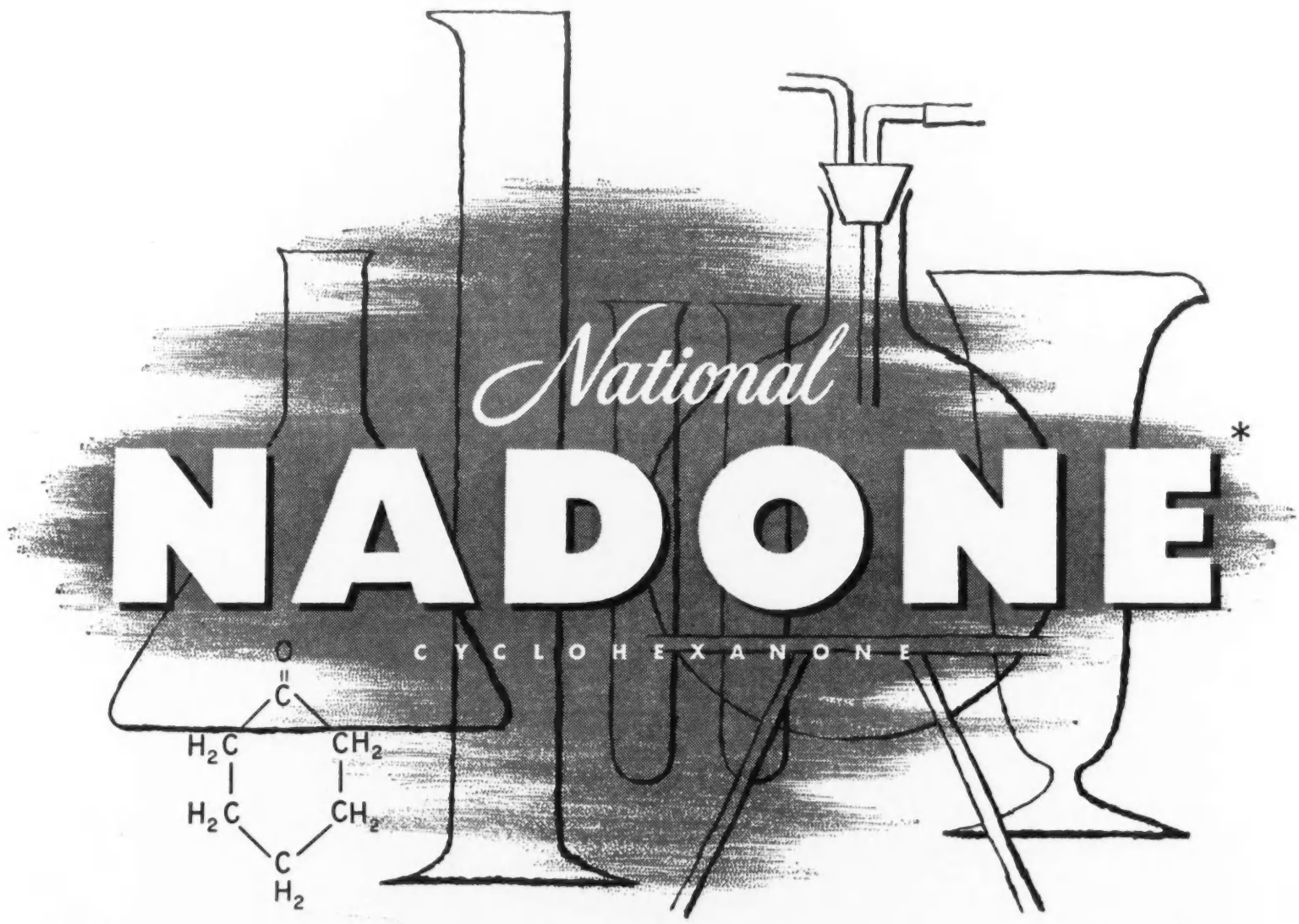

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1-6

Cobalt Acetate—Dextrin

Cobalt acetate, 23.7%, dms., dlvd. lb. 1.20 • —
Carbonate, 46% powd., bgs., dlvd. lb. 1.85 • —
Chloride, 24.2% Co. dms., dlvd. lb. 1.20 • —
Hydrate 60-61% Co., dms., dlvd. lb. 2.62 • —
Linoleate, fused, 8½% Co., dms. lb. .73¾ • —
liq., 6% Co., dms lb. .61 • —
Metal, 97-99%, kgs., ex whse lb. 2.35 • —
Naphtenate, liq., 6% Co., dms., dlvd lb. .48¼ • —
Nitrate, 20.1% Co., bbls., dlvd. lb. 1.00 • —
Oxide, black, 72½-73½% Co., kgs. lb. 1.78 • —
70-71% Co., kgs. lb. 1.73 • —
Phosphate, powd., 32.1% Co., kgs., dlvd lb. 1.69 • —
Resinate, fused, 3% Co., dms. lb. .29¾ • —
Sulfate cryst., 21% Co., dms., dlvd lb. .79 • —
monohydrated, 33% Co., dms., dlvd lb. 1.32 • —
Tallate, 6% Co., dms., dlvd lb. .43¾ • —
Cocaine, USP, cns., 100-oz. lots oz. 17.80 • —
Hydrochloride, cns., 100-oz. lots oz. 13.75 • —
Cocilana bark, bls. lb. .25 • —
Cocoa butter, bgs. lb. .69 • .72
Codeine, NF, cns., 100-oz lots oz. 13.25 • —
Hydrochloride, cns., 100-oz. lots. oz. 11.75 • —
Phosphate, USP, cns., 100-oz. lots. oz. 10.25 • —
Sulfate, USP, cns., 100-oz. lots oz. 10.75 • —

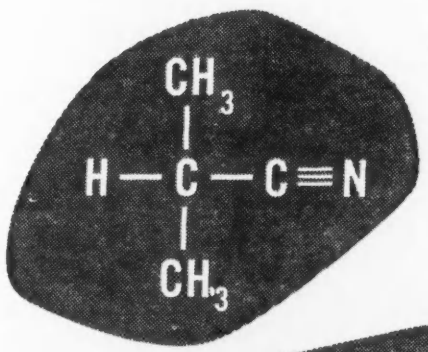
Codliver oil (see Oil, codliver).
Cohosh root, black, bls lb. .20 • .22
blue, bls lb. .20 • .22
Colchicine, USP, bots., cns. oz. 29.00 • 35.50
Colchicum root, bls. lb. .35 • —
seed, bgs lb. .60 • —
Collodion, USP, dms. lb. .32½ • —
flexible, dms lb. .34 • —
Colocynth, pulp, bls. lb. .55 • —
Colombo root, bls lb. .15 • .16
Condurango bark, bales lb. .26 • —
Copaiba balsam, cns., dms lb. .85 • —
Copper acetate, bbls. c.l. works lb. .53 • —
l.c.l., works lb. .54 • —
Carbonate, 55%, bgs., c.l., works. lb. .35¾ • —
l.c.l., works lb. .37¾ • —
Chloride, cupric, anhyd., dms., works lb. .45¼ • .45¾
cryst., dihydrate dms., works. lb. .30¾ • .31¼
dried, dms., works lb. .39 • .39½
cuprous, dms., works lb. .4540 • .4890
Cyanide, tech., bbls., 20,000-lb. lots or more lb. .77½ • —
1,000-lb. lots or more lb. .78½ • —
smaller lots lb. .80½ • —
Gluconate, dms lb. 3.15 • 3.35
Hydrate, dms., c.l., frt. alld. E. of Miss. lb. .52½ • —
l.c.l., same basis lb. .53 • —
Metal, electrolytic, dlvd., Valley basis lb. .36 • —
Naphthenate, liq., 8% Cu, dms., frt. alld lb. .24½ • —
Nitrate tech., cryst., bbls., works. lb. .33¼ • —

Copper oleate, solid, 9% Cu., dms., works lb. .45 • —
Oxide, black, bbls., 100-2,000-lb. lots, works. lb. .40½ • .50½
red, 97%, USN Type I, bbls., 100-5,000 lb. lots lb. .64½ • —
90%, USN Type II, bbls., 100-5,000 lots or more, works. lb. .62½ • —
Oxychloride, dms., c.l., works. lb. .53 • —
l.c.l., works lb. .53½ • .63½
Quinolinolate, fib. dms lb. 4.25 • 4.50
Resinate, precip., dms., frt. alld. lb. .31½ • —
Sulfate, CP, gran., dms., works. lb. .2080 • —
cryst., 99%, bgs., c.l., works. 100 lbs. 13.90 • —
l.c.l., same basis 100 lbs. 14.90 • 16.90
monohydrated, 35%, dms., c.l., works 100 lbs. 23.75 • —
l.c.l., works 100 lbs. 24.50 • —
tribasic, dealers, bgs., c.l. works, frt. equald 100 lbs. 30.00 • —
l.c.l., same basis 100 lbs. 31.00 • 34.00
Undecylenate, dms lb. 2.00 • 3.00
Copra, Atlantic, Gulf ports, c.i.f. ton. 165.00 • —
Pacific ports, c.i.f. ton. 160.00 • —
Coriander seed, Moroccan, bgs. lb. .12 • —
Roumanian, bgs lb. .09 • .09½
Yugoslavian, bgs lb. .08½ • —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.26 • —
l.c.l. 100 lbs. 7.51 • —
Syrup, 42°, non-ret., dms., c.l. 100 lbs. 7.34 • —
l.c.l. 100 lbs. 7.49 • —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, NNR, bulk gram. 3.50 3.55
Cottonseed meal, 41% bgs., Memphis ton. 57.00 • 58.00

Cramp bark, NF, bls. lb. .85 • .90
Coumarin, NF, cryst., dms. lb. 3.60 • —
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots. cbys. lb. 3.03 • 3.20
Coaltar, crude, tanks, works, frt. adjusted gal. .22 • —
soln., 80%, tanks, works gal. .2068 • —
retd., dms., c.l., works gal. .42 • .44
l.c.l., same basis gal. .53 • .55
tanks, same basis gal. .33 • .35
Wood, beachwood, cbys., dms. lb. 1.60 • 1.65
hardwood, NF, bots., cbys lb. 1.30 • 1.35
pinewood, dms., c.l., incl. lb. .0561 • —
l.c.l., incl lb. .0634 • —
N. Y. whse lb. .0745 • —
tanks, works lb. .0460 • —
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. equald lb. .1625 • —
l.c.l., same basis lb. .1675 • —
tanks, same basis lb. .145 • —
USP, non-ret. dms., c.l., same basis lb. .1775 • —
l.c.l., same basis lb. .1825 • —
tanks, same basis lb. .160 • —
m-Cresol, 95-98% dms., c.l., works, lb .60 • —
l.c.l., works lb. .61 • —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .1773 • —
l.c.l., same basis lb. .1825 • —
tanks, same basis lb. .160 • —
2-97% 2°C. dms. c.l. frt. equald. lb. .2175 • —
l.c.l. same basis lb. .2225 • —
tanks, same basis lb. .200 • —
o-Cresol, m.p. 30.5° C. and over, ret. dms., c.l., frt. equald lb. .16¾ • —
l.c.l., same basis lb. .17¼ • —
tanks, same basis lb. .15 • —
30°-30.49° C., ret. dms., c.l., frt. equald lb. .16¼ • —
l.c.l., same basis lb. .16¾ • —
tanks, same basis lb. .14½ • —
29°-29.9° C., ret. dms., c.l., frt. equald lb. .15¾ • —
l.c.l., same basis lb. .16¼ • —
tanks, same basis lb. .14 • —
25°-28.9° C., dms., c.l., frt. equald. lb. .14¾ • —
l.c.l., same basis lb. .15¼ • —
tanks, same basis lb. .13 • —
p-Cresol, 98% dms. c.l., dlvd lb. .50 • —
l.c.l., dlvd lb. .51 • —
tanks dlvd lb. .49 • —
Methyl ether, cns lb. 1.80 • 2.05
Crotonaldehyde, 91-93%, dms., t.c.l., works lb. .24¼ • .25
Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 • —
l.c.l., works 100 lbs. 14.25 • —
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works lb. .29 • —
Cubeb berries, XX, NF, bgs lb. .70 • —
powd., cs lb. .85 • —
Cumene, dms., c.l., works lb. .12 • —
l.c.l., works lb. .14 • —
tanks, works lb. .11 • —
l.c.l., works lb. .30 • —
Cumin seed, Iranian, bgs. lb. .18½ • —
Moroccan, bgs lb. .22 • .23
Turkish, bgs. lb. N.P.
Cutch extract, 55% tannin, bgs., ex dock, duty extra lb. .08½ • —
Cyanamide fertilizer mixing grades, 21% N, gran., bgs., Niagara Falls, Ont., contract ton 55.00 • —
pulv., 21% N, bgs., works unit-ton 2.75 • —
Indust. grade, bgs., c.l., works ton. 75.00 • —
l.c.l., works ton. 96.00 • —
6-16 mesh, dms., c.l., works ton 120.00 • —
l.c.l., works ton. 140.00 • —
Cyclohexane, 99% tech., dms., c.l., works gal. .70 • —
l.c.l., works gal. .72 • —
tanks, works gal. .55 • —
Cyclohexanol, tech., dms., c.l., works, frt. alld., E lb. .28 • —
l.c.l., works, same basis lb. .29 • —
tanks, works, same basis lb. .24 • —
Cyclohexanone, tech., dms., c.l., works lb. .32½ • —
l.c.l., works lb. .35 • —
tanks, works lb. .29 • —
Cyclohexene, min. 98% b.r., 82.5°C-85°C., 360-lb. dms., c.l., works lb. .55 • —
l.c.l., same basis lb. .60 • —
tanks, same basis lb. .52 • —
Cyclohexylamine, dms., c.l., works. lb. .46½ • —
l.c.l., works lb. .48½ • —
tanks, works lb. .45 • —
Cyclopropane, CP, 2-lb. cyls., works. cyl. 48.00 • —
6 oz. cyls., works cyl. 12.00 • —
USP, hospitals, cyls., 40-gal. lots, gal. .38 • —
100-gal. lots gal. .37 • —
200-gal. lots gal. .36 • —

D

2-4-D, tech., dms., c.l., works, frt. equald lb. .37 • —
l.c.l., same basis lb. .42 • .46
Butyl ester, dms., c.l., works. lb. .40 • —
l.c.l., same basis lb. .45 • .49
tanks, same basis lb. .39 • —
Isopropyl ester, dms., c.l., works. lb. .40 • —
l.c.l., works lb. .45 • .49
tanks, works lb. .39 • —
Dandelion root, bls lb. .32 • —
DDD, tech., flake, grd, fib. dms., c.l., works lb. .45 • —
l.c.l., works lb. .46 • —
DDT powder, bgs., c.l., works, frt. equald lb. .23 • .27
smaller lots, same basis lb. .24 • .28
fib. dms., c.l., same basis lb. .24 • .28
smaller lots, same basis lb. .25 • .29
1-Decanol, tech., dms., c.l., dlvd lb. .41 • —
l.c.l. dlvd. lb. .43 • —
tanks, dlvd. lb. .38½ • —
Deertongue leaves, bls lb. .45 • —
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l., t.l., works ton. 49.50 • —
17% P, paper bgs., c.l., t.l., works ton. 58.00 • —
18% P, paper bgs., c.l., t.l., works ton. 64.10 • —
Prices of defluorinated phosphate in bulk $3 per ton less than bag carlot prices.
Degras, common, bbls. lb. .10 • .12
neutral, bbls lb. .21 • .23
d-Desoxyephedrine hydrochloride, bots lb. 24.00 • 25.00
dl, bots lb. 6.50 • —
Dextrin, corn, gum, paper bgs., c.l. 100 lbs. 9.28 • —
l.c.l. 100 lbs. 9.43 • —
canary, dark, paper bgs., c.l. 100 lbs. 9.12 • —
l.c.l. 100 lbs. 9.27 • —
light, paper bgs., c.l. 100 lbs. 9.02 • —
l.c.l. 100 lbs. 9.17 • —
white, paper bgs., c.l. 100 lbs. 8.86 • —
l.c.l. 100 lbs. 9.01 • —
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.
Potato, imported, bgs. lb. .10½ • .11



Isobutyronitrile Specifications:

Boiling Range—100°-105° C.
Specific Gravity—20° C./20° C.-0.7690-0.7720
APHA color—20 max.
Water—0.8% max.
Aldehydes (as carbonyl)—1.0% max.

Isobutyronitrile is a flammable, poisonous liquid. It is shipped in 55 gal. drums.

isobutyronitrile

a reactive intermediate now available in commercial quantities

This new Eastman intermediate presents interesting possibilities for a multitude of organic reactions. The molecule is short and compact, with the reactive nitrile group available for various additions. On the other hand, thermal cracking, dehydrogenation or selective oxidation result in the formation of methacrylonitrile.

Indicative of isobutyronitrile's potentialities as an intermediate or raw material is its use in the production of Diazinon—a powerful new insecticide manufactured by Geigy Chemical Company. Diazinon is O, O-diethyl-O 2-isopropyl-4-methyl-pyrimidyl (6) thiophosphate, and isobutyronitrile is built directly into the molecule's pyrimidine ring. Isobutyronitrile is derived from isobutyraldehyde in a new plant at Texas Eastman Company's facilities in Longview, Texas.

Isobutyronitrile is only one of a versatile family of compounds derived from isobutyraldehyde. Other derivatives of this Eastman building block are isobutyl alcohol, isobutyric acid, neopentyl glycol and 2, 2, 4 trimethyl-1, 3-pentanediol. Isobutyraldehyde and its derivatives are useful in themselves or as starting materials in the production of solvents, plasticizers, pharmaceuticals, polymer intermediates, resins, insecticides, hydraulic fluids and lubricants.

If you are interested in isobutyronitrile, isobutyraldehyde, or its derivatives, we will be glad to send you samples for evaluation.

Eastman CHEMICAL PRODUCTS, INC., Kingsport, Tenn., subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tenn.; New York City; Framingham, Mass.; Cincinnati; Cleveland; Chicago; St. Louis; Houston. **WEST COAST: Wilson Meyer Co.,** San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Dextrose, USP, dms..... lb. .17¾- —
Diacetone (see Alcohol diacetone).
Diacetyl, flavor grade, bots..... lb. 4.25 - 5.50
Di-sec-amyl phenol, dms., c.l., works lb. .32 - —
l.c.l., works..... lb. .33 - —
tanks, works..... lb. .29½ - —
Di-tert-amyl phenol, dms., l.c., works lb. .32 - —
l.c.l., works..... lb. .33 - —
tanks, works..... lb. .29½ - —
o-Dianisidine fib. dms..... lb. 2.00 —
Dibenzyl sebacate, dms., c.l., works. lb. .89¾- .90
l.c.l. same basis..... lb. .90¼- .91
tanks, same basis..... lb. .88 - —
p-Dibromobenzene bgs., 500-lb. lots. lb. .55 - —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .32½ - —
l.c.l., same basis..... lb. .33½ - —
tanks, same basis..... lb. .30 - —
Sebacate, dms., c.l., works... lb. .66 - —
l.c.l., works lb. .66½ - .67
tanks, works, dlvd lb. .64 - .64½
Tartrate dms works, frt. alld. lb. .64 - —
Dibutylamine, dms., c.l., dlvd... lb. .55½ - —
l.c.l., same basis..... lb. .56½ - —
tanks, same basis lb. .53 - —
2,6-Di-tert-butyl-p-cresol, food grade, dms., t.l. c.l., dlvd lb. 1.20 - —
t.t.l., dlvd lb. 1.24 - —
tech., dms., c.l. lb. .91 - —
l.c.l. lb. .95 - —
tanks lb. .86 - —
Dicaprvl phthalate dms. c.l. dlvd.. lb. .31 - .32
l.c.l., dlvd lb. .32 - .33
tanks, dlvd lb. .29½ - —
Sebacate, dms., c.l., works... lb. .63 - —
l.c.l. works lb. .62½ - .64
tanks, works lb. .61 - —
2,5-Dichloroaniline, dms., works lb. .83 - —
o-Dichlorobenzene dms. c.l., frt. alld. E lb. .12¼- —
l.c.l. same basis..... lb. .13¼- —
tanks, same basis..... lb. .10¾- —
p-Dichlorobenzene, dms., c.l., f.o.b., works lb. .12 - .14½
l.c.l., same basis lb. .17 - —
1,4-Dichlorobutane, dms. c.l. or t.l., works lb. .33¼- —
l.c.l. or t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichlorothane (see DDT).
Dichloropentanes, dist., dms., c.l., works lb. .05 - —
l.c.l. works lb. .06 - —
tanks works lb. .03 - —
Dicyclohexylamine, dms., c.l., works. lb. .51 - —
l.c.l. works lb. .51¾- —
tanks, works lb. 49½- —
Dicyclohexyl phthalate, fib. dms., c.l., works, frt. alld lb. .58¼- .59
l.c.l. same basis lb. .59¼- .60
Didecyl phthalate dms. c.l., works. lb. .34 - —
l.c.l. same basis..... lb. .35 - —
tanks, same basis lb. .31½- —
Dieldrin dms., frt. alld..... lb. 1.80 - —
l.c.l., frt. alld lb. 1.85 - —
Diethanolamine dms. c.l., dlvd. E. lb. .27 - —
l.c.l., same basis..... lb. .28 - —
tanks, same basis lb. .24½- —
Diethyl carbonate dms., c.l., frt. alld lb. .47 - —
l.c.l. same basis lb. .48 - —
tanks, same basis lb. .45 - —
Ethanolamines, dms., c.l., dlvd. lb. .69½- —
l.c.l., dlvd lb. .70½- —
tanks dlvd lb. .67 - —
Oxalate dms., c.l., frt. alld lb. .42 - —
l.c.l. same basis lb. .43 - .45
tanks same basis lb. .40 - —
Phthalate, dms., c.l., dlvd..... lb. .30 - .30½
l.c.l., dlvd. lb. .31 - .31¼
tanks, dlvd. lb. .27½- .28
Sulfate, dms., c.l., works..... lb. .19 - —
l.c.l., works lb. .19¾- —
tanks, works lb. .17 - —
Diethylamine, dms., c.l., dlvd. E lb. .51 - —
l.c.l., same basis..... lb. .52 - —
tanks, same basis lb. .48½- —
N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 - —
l.c.l., same basis lb. .58 - —
tanks, same basis lb. .55 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Diethylene glycol dms., c.l., dlvd. E. lb. .17¾- —
l.c.l., same basis..... lb. .18¾- —
tanks, same basis..... lb. .15¼- —
Boriborate, dms., l.c.l..... lb. .31 - —
Diethyl ether, dms., c.l., works. lb. .47½- —
l.c.l., works..... lb. .48¼- —
Monobutyl ether, dms., c.l., dlvd. E lb. .30¾- —
l.c.l., dlvd. E..... lb. .31¾- —
tanks, dlvd. E..... lb. .28¼- —
Acetate, dms., c.l., works. lb. .30¼- —
l.c.l., works lb. .31 - —
tanks, dlvd. E. lb. .28¼- —
Monoethyl ether, dms., c.l., dlvd. lb. .22½- —
l.c.l., dlvd. lb. .23½- —
tanks, dlvd lb. .20 - —
Acetate, dms., c.l., works. lb. .27¼- —
l.c.l., works. lb. .28 - —
tanks, dlvd. E lb. .25¼- —
Monomethyl ether, dms., c.l., dlvd lb. .20½- —
l.c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .18½- —
Diethylenetriamine, dms., c.l., dlvd. E lb. .44 - —
l.c.l., dlvd. E lb. .45 - —
tanks, dlvd. E lb. .41½- —
Diethylstilbestrol, USP, bots., 10-kilo lots. kilo. 100.00 -147.50
1 kilo lot. kilo. 110.00 -152.50
Digitalis leaves, USP, dom., dms., lb. 1.20 - —
Digitoxin, USP, bots..... gram. 4.75 - 5.25
Diglycol laurate, dms..... lb. .32¾- .34
Stearate, dms., ton lots..... lb. .26 - .28
Dihexyl sebacate, dms., c.l., works. lb. .64 - —
l.c.l., works lb. .64½- .65
tanks, works lb. .62 - —
Dihydrazine sulfate, dms., works. lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk, gram. .0750- .0775
Sulfate, bulk..... gram. .0750- .0775
1,2-Dihydroxy anthraquinone, dms., works lb. 2.75 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 - —
tech., dms lb. 1.09 - —
Di-isobutyl ketone, dms., c.l., dlvd. lb. .17 - —
l.c.l., dlvd. lb. .18 - —
tanks, dlvd. lb. .14½- —
Phthalate, dms., c.l., dlvd. E. lb. .31½- —
l.c.l., same basis..... lb. .32½- —
tanks, same basis lb. .29 - —
Di-isobutylene, dms., c.l., dlvd. E. lb. .10 - —
l.c.l. dlvd. E lb. .11 - —
tanks, dlvd E lb. .08 - —
Di-iso-octyl pnthalate, dms., c.l., dlvd. lb. .31 - —
l.c.l., same basis..... lb. .32 - —
tanks, same basis..... lb. .28½- —
Sebacate, dms., c.l., works.... lb. .63½- —
l.c.l., works..... lb. .64½- —
tanks, works lb. .61 - —

Di-isopropanolamine, dms., c.l., dlvd. lb. .23¼- —
l.c.l., same basis..... lb. .24¼- —
tanks, same basis..... lb. .20¾- —
Di-isopropylamine dms., c.l., dlvd. E. of Rockies lb. .50½- —
l.c.l., same basis..... lb. .51½- —
tanks, same basis lb. .48 - —
Dill seed, dewhiskered, bgs..... lb. .09¼- —
nat., bgs. lb. .08 - —
Dimethyl anthranilate, cns..... lb. 4.35 - 5.10
Chloroacetal, dms., c.l., works lb. .45 - —
l.c.l., works lb. .50 - —
tanks, works lb. .40 - —
Ethanolamines, anhyd., dms., c.l., dlvd lb. 1.225 - —
l.c.l. dlvd lb. 1.235 - —
tanks, dlvd. lb. 1.20 - —
70% dms. c.l., dlvd., 100% basis, contained amines lb. .68½- —
l.c.l., dlvd., 100% basis lb. .69½- —
tanks, dlvd. 100% basis lb. .66 - —
Hydroquinone, dms. lb. 2.20 - 2.25
Phthalate, dms., c.l., works..... lb. .31 - —
l.c.l., works lb. .32 - —
tanks, works lb. .28½- —
Sebacate, dms., c.l., works... lb. 1.275 - —
l.c.l., dlvd lb. 1.285 - —
tanks, works lb. 1.23 - —
Sulfate, 55-gal. ret. dms., c.l., works lb. .15 - —
l.c.l., works lb .16 - —
10-gal. ret. dms., l.c.l., works. lb. .16½- —
Dimethylamine 25% soln., dms., c.l., frt equald lb. .42 - —
l.c.l., frt. equald lb. .42½- —
tanks, frt. equald lb. .33 - —
40% soln. dms. c.l., frt. equald. lb. .39 - —
l.c.l. frt. equald lb. .39½- —
tanks, frt. equald lb. .34 - —

N,N-Dimethylaniline, dms., c.l., frt. alld lb. .32 - —
l.c.l., frt. alld lb. .33 - —
tanks, frt. alld lb. .30 - —
N,N-Dimethylformamide dms. works. lb. .34 - .39
tanks works lb. .33 - —
2,4-Dinitroaniline, dms., 1,000-lb. lots, same basis, frt. equald lb. .68 - —
smaller lots, frt equald lb. .71 - —
m-Dinitrobenzene, 83°C., dms lb. .22 - —
89°C., dms lb. .24 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E lb. .15¼- —
l.c.l., frt. alld E lb. .15¾- —
tanks, frt alld E lb. .15 - —
2,4-Dinitrochlorobenzene, crystallizing at 48°C., dms., c.l., frt. alld. E lb. .20¼- —
l.c.l. frt. alld. E lb. .20¾- —
tanks, frt. alld. E lb. .20 - —
2,4-Dinitrophenol, bbls lb. .37 - —
2,4-Dinitrotoluene, oily, dms.... lb. .11 - —
refd., 63°C., dms lb. .23 - —
Dioctyl adipate, dms., c.l., works. lb. .42½- —
l.c.l., works lb. .43½- —
tanks, works lb. .40 - —
Phthalate, dms., c.l., frt. alld. lb. .31 - —
l.c.l., frt. alld. lb. .32 - —
tanks, frt. alld. lb. .28½- —
Sebacate, dms., c.l., works.... lb. .60½- —
l.c.l., works lb. .61½- .62½
tanks, works, dlvd lb. .58 - .58½
1,4-Dioxane, dms., c.l., works.... lb. .28¾- —
l.c.l., same basis lb. .29¼- —
tanks, same basis lb. .27 - —

Dip oil (see Tar acid oil).
Dipentaerythritol, bgs., l.c.l., works. lb. .35 - —
Dipentene, dest-dist., dms., c.l., works gal. .47 - —
l.c.l., works gal. .52 - —
ex-whse. gal. .62 - —
steam-dist., dms., c.l., works, South gal. .59 - —
dlvd. N. Y gal. .67 - —
tanks, works, South gal. .45 - —
Diphenyl, bbls., c.l., works lb. .15 —
l.c.l., works lb. .16 —
Diphenyl in bags ¼c lower
Oxide, perfume grade, cns lb. .56 .61
Phthalate dms., c.l., works lb. .51¾ —
l.c.l., works lb. .53¾- —
Diphenylamine, refd. flake, bgs., c.l., works, frt. equald lb. .33 - —
l.c.l., works, frt. equald lb. .35 - —
fused, tanks works, frt equald lb. .31 - —
tech., fused, tanks, works, frt. equald lb. .30 - —
Diphenylguanidine, bgs., dms., ton lots, frt. alld lb. .52 - —
smaller lots, frt. alld. lb. .53 - —
Diphenylhydantoin-sodium USP. dms lb 5.00 5.60
Dipropylene glycol dms. c.l., frt. alld lb. .17¼ —
l.c.l., same basis lb. .18¼ —
tanks, same basis lb. .15¼ —
Monomethyl ether dms., c.l., dlvd E lb. .20 - —
l.c.l., same basis lb .21 - —
tanks same basis lb. .18½- —

Oronite*

ISOPHTHALIC

offers unusual reaction and performance properties

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For protective coatings—industrial, interior and exterior architectural paints and baking finishes

Reacts more completely
Makes harder, more flexible films
Produces tougher films
Better thermal stability
Permits using more low cost oils
Better gloss and gloss retention
Odorless
Minimizes fume problems

For plastics—polyesters, polyamides, polyester-amides, reinforced plastics of unsaturated polyester type

Provides full molecular weight range of linear and cross linked polymers
New melting point characteristics
Higher polymers are formed
A lower cost raw material
Greater strength and adhesive properties

For plasticizers—poly-vinyl chloride and other fields

Greater thermal & color stability
Higher boiling points
Better resistance to oxidation
Greater plasticizing efficiency
Lower volatility
Less toxicity and no odor

Users of ISOPHTHALIC are fast discovering this new Oronite chemical offers properties and cost advantages heretofore unobtainable. If you haven't inquired about or investigated Isophthalic in your own laboratory, it will pay you to do so. Technical data is available on many of its unique properties. Contact the Oronite office nearest you for complete information.

*T.M.

ORONITE CHEMICAL COMPANY

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20 North Wacker Drive, Chicago 6, Illinois 714 West Olympic Blvd., Los Angeles 15, Calif.
EUROPEAN OFFICE
36, Avenue William-Favre, Geneva, Switzerland

Di-o-tolylguanidine, dms., ton lots, frt. alld. lb. .62
smaller lots, frt. alld. lb. .63
Divi-divi, 45% tannin, bgs., bls., c.l., U. S. ports, exdock ton 78.00 Nom.
Divinylbenzene 20-25% dms., c.l., works, frt. equald lb. .20
t.c.l., same basis lb. .21
tanks, same basis lb. .19
50-60% dms., c.l., works, 100% basis lb. 1.00
t.c.l. works, 100% basis lb. 1.05
Dodecylbenzene, dms., c.l., frt. alld lb. .14
t.c.l. same basis lb. .15
tanks, same basis lb. .12

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb and 1-lb. lots, dlvd:—
Blue, FD & C, No. 1 lb. 15.65 -17.60
No. 2 lb. 15.65 -17.60
Green, FD & C, No. 1 lb. 15.65 -17.60
No. 2 lb. 19.60 -22.85
No 3 lb. 21.30 -35.90
Red, FD & C, No. 1, cns lb. 5.90 7.85
No. 2 lb. 3.30 4.10
No. 3 lb. 19.60 -22.85
No. 4 lb. 5.55 7.50
Violet, FD & C, No. 1, cns lb. 15.65 -17.60
Yellow, FD & C, No. 1, cns lb. 9.15 -11.05
No 5 lb. 3.30 4.10
No. 6 lb. 3.30 4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—
Black, D&C, No. 1 lb. 10.50 -10.95
Brown, D&C, No. 1 lb. 15.65 -16.10
Green, D&C, No. 5 lb. 15.65 -16.10
No. 6 lb. 15.65 -16.10
No. 7 lb. 14.35 -14.80

Dyes, coaltar, certified colors for drugs and cosmetics, 1-lb. lots, works, 25-50 lb. lots, dlvd:—
Orange, D&C, No. 3 lb. 10.50 -10.95
No. 4 lb. 19.60 -20.05
No. 5 lb. 5.25 5.70
No. 17 lb. 10.50 10.95
No. 18 lb. 23.55 -24.00
No. 19 lb. 15.15.00 -15.45
No. 21 lb. 3.10 3.60
No. 22 lb. 10.50 -10.95
No. 23 lb. 24.20 -24.65
No. 33 lb. 17.00 -17.45
Violet, D&C, No. 2 lb. 15.65 -16.10
Yellow, D&C, No. 7 lb. 10.50 -10.95
No. 8 lb. 10.50 -10.95
No. 10 lb. 13.05 -13.50
No. 11 lb. 13.05 -13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 1-lb. lots, works, 25-50 lb. lots dlvd:—
Blue, Ext., D&C, No. 1, cns lb. 15.65 -16.10
Green, Ext., D&C, No. 1, cns lb. 15.65 -16.10
Red, Ext., D&C, No. 1, cns lb. 13.05 -13.50
Yellow, Ext., D&C, No. 1, cns lb. 10.50 -10.95

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd., No.
20 Chrysoidine Y, dustless lb. .89
27 Fast light, orange 2G lb. 1.09
31 Phloxine 2G lb. .89
36 Yellow 2G lb. 1.00
40 Orange R extra, conc lb. 1.29
57 Fuchsine 6B lb. 1.31
79 Scarlet 2R lb. .98
151 Orange AD lb. .67
161 Orange RR lb. .80
176 Fast red A lb. 1.18
179 Rubine XX, conc lb. 1.25
180 Blue F4B lb. 1.11
185 Brilliant scarlet 3RN, conc. lb. 1.02
202 Chrome blue black R, conc. lb. .91
203 Chrome black T lb. .94
208 Fast blue SR lb. 1.10
216 Chrome red B lb. .92
234 Brown V lb. 1.08
246 Blue black, extra, conc lb. 1.16
275 Milling red 3R, conc lb. 1.62
289 Navy blue 3R, conc lb. 1.44
299 Black F, conc lb. 1.86
304 Neutral black 2B, conc. lb. 2.21
326 Fast scarlet 4BNC lb. 1.80
332 Bismark brown RX, conc., dustless lb. 1.16
365 Brilliant yellow, conc lb. 3.11
382 Scarlet B lb. 2.20
401 Diazo black BHD lb. .79
406 Blue 2B, extra conc lb. 1.30
419 Red FC lb. 1.23
420 Brown M lb. 1.19
448 Red 4BX, conc lb. 1.43
513 Diamine sky blue FF, extra, conc lb. 1.63
561 Brown B lb. 2.45
581 Black EB, 200% lb. 1.13
593 Green BY, conc lb. .87

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd. No.
596 Yellow brown K, extra lb. 1.07
620 Yellow 2G lb. 1.11
639 Fast Yellow GG lb. 1.97
640 Yellow XX lb. 1.95
655 Yellow OX lb. 2.24
657 Green V lb. 2.31
662 Brilliant green G lb. 3.07
667 Milling green 6B, conc lb. 4.05
671 Blue EG lb. 1.68
681 Crystal violet powder lb. 2.15
698 Violet 6BN powder lb. 1.91
720 Brilliant blue 6BG lb. 2.07
729 Blue B, extra conc lb. 3.06
749 Red BX lb. 4.76
800 Chinoline yellow ZSS lb. 2.67
860 Induline base ZM lb. 1.07
860 Induline base Z2R lb. 1.07
814 Yellow NN, conc lb. 3.11
841 Safranine GF, extra, conc. lb. 3.48
865 Nigrosine J lb. 4.76
922 Blue GXX lb. 1.88
978 Black GXCF, conc lb. .32
1034 Alizarine red SC lb. 2.85
1054 Alizarine blue SAPX lb. 3.20
1078 Alizarine green CG, extra. lb. 2.99
1085 Alizarine blue black B lb. 2.56
1096 Golden orange GFD, single paste lb. 2.19
1099 Dark blue BO, single paste. lb. 1.93
1101 Jade green N supra double paste lb. 1.10
1106 Blue RS, double paste lb. 3.26
1113 Blue BLFD, double paste lb. 2.48
1150 Olive R, single paste lb. 1.21
1151 Brown R, single paste lb. 1.94
1171 Indigo synthetic, 20% paste lb. .31
1217 Orange RD, double powder. lb. 3.94
p-4 Brown PG lb 2.54
p-14 Brown EB lb 1.83
p-24 Gray L lb 1.76
p-80 Diazo brilliant scarlet ROAD lb 3.07
p-202 Diazo black VJ, conc lb 2.10
p-244 Brilliant scarlet BN lb. 1.44
p-313 Naphthol SWF lb 2.24

Dyes, coaltar, oil-soluble, 100-lb. drums., dlvd.
24 Oil orange Z-7078 lb. 1.06
73 Oil scarlet BL lb. 1.44
1073 Oil violet ZIRS lb. 6.81
1073 Alizarine cyanine green base Z lb. 6.13
1080 Oil violet special Z lb. 6.81
Oil black ZBC lb. 4.46
Oil black ZBD lb. 3.03
Oil black ZHH lb. 4.61
Oil black ZMM lb. 6.52
Oil blue ZN lb. 8.02
Oil blue ZV lb. 4.95
Oil orange ZMG lb. 1.32
Oil red Z-1700 lb. 1.49
Oil yellow ZG, conc lb. 6.33

Dyes, coaltar, spirit soluble, 100 lb. dms. dlvd.
p-517 Spirit yellow ZR lb. 4.62
p-520 Spirit orange ZR, conc lb. 5.87
Spirit black ZRB lb 2.95
Spirit brown ZG lb. 5.30
Spirit red ZB, conc lb. 6.41

E

Echinacea root, bls lb. 1.10
Egg albumin (see Albumin).
Yolk, dried, dom., bbls lb. 1.03 - 1.05
tanners, bbls lb. .06 - .06¼
Elm bark, grinding, bls lb. .30 - .32
powd., bbls., bxs lb. .45
select, bundles lb. 75
Emetine hydrochloride, USP, bots oz. 48.25 -40.00
Endrin, tech., dms., dlvd., 100% basis lb. 3.75
Ephedrine, syn., USP, anhyd., bots., 100-oz lots oz. .98 - 1.00
hydrous bots., 100-oz lots oz. .92
Hydrochloride, tins, 100-oz.-lots oz. .75
Sulfate, cryst., tins, 100-oz. lots oz. .72
oz. lots oz. .72
powd., tins, 100-oz. lots oz. .73
Epichlorohydrin, dms., c.l., dlvd lb. .35
t.c.l., dlvd lb. .36
tanks, dlvd lb. .33
Epinephrine, syn., USP, bots., 100-gram lots gram .60
Epsom salt (see Magnesium sulfate).
Ergot, NF dms., tin-lined lb 2.00
Eserine salicylate, bots oz. 72.50 -84.00
Sulfate, bots oz. 87.75
Ether (see specific product).
Ethyl acetate, nat., ferment., 85-88%, dms., c.l., frt. alld lb. .14½
t.c.l., frt. alld lb. .15½
tanks, frt. alld lb. .12
95-98%, dms., c.l., frt. alld. lb. .14¾
t.c.l., frt. alld lb. .15¾
tanks, frt. alld lb. .12¼
99%, dms., c.l., frt. alld lb. .15
t.c.l., frt. alld lb. .16
tanks, frt. alld lb. .12½
syn., 85-88%, dms., c.l., dlvd. lb. .14½
t.c.l., dlvd lb. .15½
tanks, dlvd lb. .12
95-98%, dms., c.l., dlvd lb. .14¾
t.c.l., dlvd lb. .15¾
tanks, dlvd lb. .12¼
99%, dms., c.l., dlvd lb. .15
t.c.l., dlvd lb. .16
tanks, dlvd lb. .12½
Acetotate, dms., c.l., dlvd lb. .58½
lb. .58½
t.c.l., dlvd lb. .59½
tanks, dlvd lb. .56
Acrylate, dms., c.l., t.l., dlvd. lb. .36
t.t.l., dlvd lb. .37
tanks, dlvd lb. .34
Aminobenzoate, USP (see Benzocaine)
Amyl keytone, dms., c.l., dlvd lb. .20
Amyl ketone, dms., c.l., dlvd lb. .20
t.c.l., same basis lb. .21
tanks, same basis lb. .17½
Benzoate, bots lb. .74 - .90
Bromide, tech., 98%, dms., c.l., frt. alld. E lb. .42 - .44
t.c.l., frt. alld. E lb. .44 - .46
Butyl ketone, dms., c.l., works. lb. .36
t.c.l., works lb. .36¾
tanks, works lb. .34
Butyrate, works lb. .85 - .90
Carbamate (see Urethane).
Cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, works lb. .70 - .80
smaller lots, works lb. .72
vis. 10, 20, 50, 100, 150 cps., bgs., 2,000-lb. lots or more, works lb. .65 - .70
smaller lots, works lb. .67 - .81
Chloride, tech., cyl., works .20 - .22
dms., works lb. .18 - .20
tanks, works lb. .10
Cinnamate, cns lb. 3.35 - 3.45

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SPECIFICATIONS:

Specific gravity of material at 20°C. compared to that of water at 4°C.	1.450 to 1.465
Distillation range, 5 to 95% within	3°C.
Distillation range to include	38.4°C.
Acidity	Neutral
Color	Water white and clear

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Ethyl ether, absolute, ACS, dms. lb. .27 - —
anesthesia, USP hospitals, 1-lb. cns lb 1.01 - —
½-lb. cns lb. 1.11 - —
¼-lb cns lb. 1.21 - —
indust., dms., c.l., dlvd..... lb. .12½- —
l.c.l., dlvd. E ..... lb. .13½- —
tanks, dlvd. E. lb. .10 —
Gallate, dms., 100 to 2,000-lb. lots lb. 3.90 - 4.40
Iodide, cbys., works lb. 3.30 - —
Methacrylate, dms., c.l., and less than truckload, works, frt equald lb .51½- .52
Morphine hydrochloride, USP bots. oz.11.85 - —
Nitrite (see Nitrous ether)
Oenanthate, dms lb 1.00 1.50
Oleate, dms, l.c.l., works lb No prices.
Oxalate (see Diethyl oxalate)
Silicate dist. (see Tetraethyl orthosilicate).
40% available SiO_2, dms. c.l., dlvd lb. .49½-
l.c.l., dlvd lb. .50½-
tanks, dlvd lb. .47 —
Ethylethanolamines, mixed, dms., c.l., dlvd E lb. .43½- —
l.c.l. dlvd E lb. .44½- —
tanks, dlvd. E lb .41½- —
N-Etnyl-a-naphthylamine dms. works, b 1.02 - —
N-Ethyl-o-toluidide, bbls b. .88 - —
Ethylamine (see Mono, Di- or Tri-)
N-Ethylaniline dms c.l. frt alld. lb. .57 - —
l.c.l., frt, alld lb. .58 - —
tanks, frt, alld lb. .55 - —
Ethylbenzene, 99% dms., c.l., or t.l., frt. equald lb. .17 - —
l.t.l. same basis lb. .18 - —
tanks, same basis lb. .15 - —
Ethylene dichloride dms. c.l. dlvd. lb. .11½- —
l.c.l. same basis lb. .12½- —
tanks, same basis lb. .09 - —
Ethylene dichloride prices W. of Rockies 1c. per lb higher.
Glycol, indust dms. c.l., dlvd. E lb. .16 - —
l.c.l., same basis lb. .17 - —
tanks, same basis lb. .13½- —
Monobutyl ether dms., c.l., dlvd. E lb. .22 - —
l.c.l., dlvd E lb. .23 - —
tanks, dlvd E lb. .19½- —
Monoethyl ether dms., c.l., dlvd, E lb. .21 - —
l.c.l., dlvd. E lb. .22 - —
tanks, dlvd E lb. .18½- —
acetate, dms., l.c., dlvd., E lb. .19½- —
l.c.l., dlvd E lb. .20½- —
tanks, dlvd E lb. .17 - —
Monomethyl ether dms., c.l., dlvd. E lb. .21 - —
l.c.l., dlvd. E lb. .22 - —
tanks, dlvd E lb. .18½- —
acetate, dms., l.c., dlvd., E lb. .29 - —
l.c.l., dlvd E... lb. .29¾- —
tanks, dlvd E lb. .27 —
Monostearate triple pressed, dms lb. .33 - .35
Oxide, dms., c.l., dlvd., E ..... lb. .21½- —
l.c.l. dlvd. E lb. .24½- —
tanks, dlvd E lb. .15½- —
Trichloride (see Trichloroethane)
Ethylenediamine, 85-88%, dms., c.l., dlvd E, 100% basis lb. .46 - —
l.c.l. dlvd E., 100% basis lb. .47 - —
tanks, dlvd E., 100% basis lb. .44 - —
Ethylvanillin, cns. 25-lb lots... lb. 6.20 - 6.25
Eucalyptol, USP, cns. dms ... lb 1.25 1.50
Eugenol, USP bots ..... lb. 2.25 - 2.60
Euphorbia herb, bls ..... lb. .15 - .17

F

Feldspar, 140-200 mesh bulk, c.l., works ton.18.50 - —
Feldspar in bags $3 per ton higher
Fennel seed, Argentine, bgs..... lb. .13½- —
Czech, medium, bgs..... lb. .09 - —
Indian, light, bgs ..... lb. .15½- —
Roumanian, bgs ..... lb. .09 - —
Fenugreek seed, Indian, bgs lb. .08½- .09
Moroccan, bgs lb. .09½- .09
Ferric acetate liquor, 28°, bbls., c.l. works lb. .09 —
l.c.l., works lb. .09¾- —
soln., USP IX, cbys lb. .16 - —
djns. lb. .17 —
Cacaodylate NF, bots lb.13.00 -14.00
Chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.00 - —
l.c.l., works 100 lbs. 7.85 - —
indust., cryst. bbls., c.l., works. 100 lbs. 5.25 - 6.75
l.c.l., works 100 lbs. 5.75 - 7.25
42° Be, photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
sewage grade tanks, frt. equald 100% basis. 100 lbs. 3.50 - —
USP cryst dms works lb 07½- .09
Citrate, gran., dms..... lb. .86 - —
Hypophosphite, NF dms lb. 3.45 - —
Naphthenate, liq. 6% Fe, dms., frt. alld lb. .25¾- —
Oxalate gran. dms lb. .85 - .87
Oxides (see oxides under Black, Brown, Red, and Yellow.)
Phosphate NF soluble, gran., pearls cs lb. .64 - .65
Pyrophosphate, NF VII, soluble, powd., gran., pearls, dms., 10,000 lb. lots lb. .40½- —
Resinate, 6¾% Fe. dms., frt. alld. lb. .29½- —
Stearate, dms. c.l., frt. alld lb. .37 - .41
l.c.l. frt. alld lb. .38 .42
Sulfate, partially hydrated, bgs., c.l., works ton.31.75 -33.75
l.c.l. works ton.34.75 -40.75
lb. .27 - —
Ferric-ammonium, citrate, brown, pearls, NF, gran., dms lb. .65 - .68
green, pearls, USP XII, gran., dms. lb. .66 - .69
Oxalate, fine gran., dms lb. .25½- .28½
Ferric-potassium oxalate, fine gran., dms lb. .30½- .33½
Ferric-sodium oxalate, fine gran., dms lb. .25½- .28½
Ferrous gluconate, NF, dms lb. .94 - —
Sulfate, gran., bgs., c.l. works. ton.34.50 - —
l.c.l., dlvd. Metropolitan area 100 lbs. 3.35 - 4.25
bbls., c.l., works ton.40.00 - —
bulk, c.l., works ton.27.00 - —
USP cryst., bbls., dms..... lb 09½- .10
Fir balsam, Canada, cns gal.32.00 - —
Oregon, bbls gal. 4.50 - —
Fishliver oil (see Oil fishliver).
Fishmeal, dom., menhaden, 60% protein grd., bgs., Chesapeake Bay area ton.140.00 - —
scrap, same basis ton.136.00 - —
Fleaseed (see Psyllium seed)
Formaldehyde, 37%, (inhibited, 7 to 8% methanol), USP, Zone 1, dms., c.l., dlvd. lb. .0675- —
tanks, dlvd..... lb. .0420- —
Zone 2, dms., c.l., dlvd. lb. .0705- —
tanks, dlvd..... lb. .0450- —
(12 to 15% methanol), USP, Zone 1, dms., c.l., dlvd. lb. .0700- —
tanks, dlvd..... lb. .0445- —
Zone 2, dms., c.l., dlvd. lb. .0735- —
tanks, dlvd ..... lb. .0480- —
(uninhibited, methanol-free), Zone 1, tanks, dlvd. lb. .0395- —
Zone 2, tanks, dlvd..... lb. .0420- —

Fringetree bark, bls..... lb. .60 - .61
Fullers' earth, bgs., c.l., Ill. mines, ton.19.00 - —
powd., insecticide grade, dried, bgs., c.l., Ga. or Fla. mines. ton.17.50 - —
calcined, bgs., c.l., same basis ton.20.00 -21.75
oil-bleaching grade, 100-mesh, bgs., c.l., same basis ton.16.30 -17.00
200-mesh, bgs. c.l., same basis ton.17.50 -18.00
spent, bgs., c.l. shipt. point ton. 4.50 5.00
Furfural, dms., c.l., works..... lb. .13 —
l.c.l., works..... lb. .14 - —
tanks, dlvd. E..... lb. .12 - —
dlvd. W ..... lb. .13 - —
Fusel oil, refd., dms., c.l., dlvd lb. .18 - —
l.c.l., dlvd ..... lb. .19 - —
tanks, dlvd ..... lb. .15½- —
Fustic extract, cryst., No. 1, bbls., l.c.l lb. .47½- —
No. 2, bbls., l.c.l ..... lb. .45½- —
No. 3, bbls., l.c.l..... lb. 43½- —
liq., No. 1, bbls., l.c.l..... lb. .22½- —
No. 2, bbls., l.c.l..... lb. 21½- —
No. 3, bbls., l.c.l..... lb. .19 —
solid, No. 1, bxs., l.c.l..... lb. .45 - —

G

G salt, bbls., frt. alld, 100% basis lb. .73 - —
Gammapicoline (see g-Picoline)
Gelatin, edible, pure (pork skin), 75 Bloom test, bbls., c.l lb. .53 - —
150 Bloom test, bbl., c.l lb. .64 - —
200 Bloom test, bbls., c.l lb. .70 - —
225 Bloom test, bbls., c.l lb. .73 - —
275 Bloom test, bbl., c.l lb. .81 - —

Gelsemium root, bls..... lb. .26 - —
Gentian root, bls. ..... lb. .23 - —
grd., bbls., bxs..... lb. .27 - —
powd., bbls., bxs..... lb. .27 - —
Geraniol, extra, cns., dms. ..... lb. 3.95 - —
standard, cns., dms. ..... lb. 3.75 - —
Geranyl acetate, cns. ..... lb. 3.95 - —
Ginger oleoresin, NF from African root, bots lb 4.00 7.75
from Jamaican root, bots lb 6.00 -10.25
Root, African, bls. ..... lb. .33 - —
Cochin, bgs..... lb. .26½- —
Jamaican, No. 2, bgs..... lb. .76 - —
No. 3 bgs. ..... lb. .75 - —
Nigerian, split, bgs..... lb. .28 - —
Glauber's salt, anhyd (see Sodium sulfate)
Glue, bone, extracted, dry bone, 86 jellygrams bgs., c.l., dlvd lb. .15 - —
104 jellygrams, same basis lb. .17 - —
131 jellygrams, same basis lb. .18 - —
164 jellygrams, same basis lb. .20½- —
191 jellygrams, same basis lb. .21 —
222 jellygrams, same basis lb. .22 —
12 green 40 jellygrams, bgs., c.l., dlvd lb. .13½- —
65 jellygrams, same basis lb. .13¾- —
86 jellygrams same basis lb. .14 —
115 jellygrams same basis lb. .14½- —
135 jellygrams, same basis lb. .15 —
164 jellygrams same basis lb. .16 —
180 jellygrams, same basis lb. .17 —
200 jellygrams, same basis lb. .18½- —
Bone glue l.c.l. prices 1c. higher.

Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd. lb. .15 - —
95-121 bgs., c.l. dlvd lb 16 —
122-149, bgs., c.l., dlvd..... lb. .18½- —
150-177, bgs., c.l., dlvd..... lb. .21 - —
178-206, bgs., c.l., dlvd..... lb. .23½- —
207-236, bgs., c.l., dlvd..... lb. .26 - —
237-266, bgs., c.l., dlvd..... lb. .28 - —
267-298, bgs., c.l., dlvd..... lb. .30 - —
299-330, bgs., c.l., dlvd..... lb. .32 - —
331-362 bgs, c.l., dlvd..... lb. .34 - —
363-394, bgs., c.l., dlvd..... lb. .36 - —
395-427, bgs., c.l., dlvd..... lb. .38 - —
428-460, bgs., c.l., dlvd..... lb. 40 - —
461-494, bgs., c.l., dlvd..... lb. .42 - —
495-529, bgs., c.l., dlvd..... lb. .43 - —
Hide glue l.c.l. prices 1c higher
l-Glutamine, bots ..... gram. .63 - —
Glycerine, nat., crude, saponification, 88%, to refineries, tanks lb. .16½- —
soaplye, 80%, tanks lb. .15 - —
refd., CP USP 99% dms., c.l., dlvd lb. .29¾- —
l.c.l., dlvd ..... lb. .29⅞- —
tanks, dlvd..... lb. .27⅞- —
96% dms., c.l., dlvd lb. .28½- —
l.c.l., dlvd..... lb. .29 - —
tanks, dlvd..... lb. .27 - —
high gravity, dms., c.l., dlvd. lb. .29¼- —
l.c.l., dvid ..... lb. .29¾- —
tanks, dlvd lb. .27¾- —
yellow, refd., high gravity lb. .28½- —
l.c.l., dlvd. ..... lb. .29 —
syn., dms., c.l., dlvd..... lb. 29½- —
l.c.l., dlvd. ..... lb. .30 —
tanks, dlvd..... lb. .28 - —

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☐ 16-page booklet on Glycerine properties and applications

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Glycine (see Acid aminoacetic).
Glycerol (see Glycerine).
Glyoxal, 30% dms, c.l., works lb. .18½ - —
l.c.l., works lb. .20¼ - —
Golden seal root, NF, tested, bls. lb. 3.50 - —
Graphite amorph., powd., bgs., fib. dms., ex whse lb. .06 - .09½
crystalline 88-90%, powd., bgs., fib dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib, dms., ex whse lb. .21 - .24½
95-97%, powd., bgs., fib, dms., ex whse lb. .29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
No. 2 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
Grease, white, choice, all hog tanks, dlvd lb. .08½ - .08⅝
yellow, tanks, dlvd lb. .07 - .07⅛
Green, brilliant, thioflavin, toner, molybdated, PMA, kgs., works lb. 5.10 - —
tungstated, PTMA, kgs., works, lb. 6.40 - —
Chrome, CP, dark, light, medium, blue content 1 to 15%, bbls., N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis lb. .40 - .42
16-30%, bbls., same basis lb. .40 - .42
31-45%, bbls., same basis lb. .41 - .43
45-49%, bbls., same basis lb. .44 - .46
Green, chrome, CP, dark, light, medium, blue content 1-15%, bbls., N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis, reduced color, 25% lb. .19 - .20

Chrome green prices are ½c. higher, dlvd at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.), Miss N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.) Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.

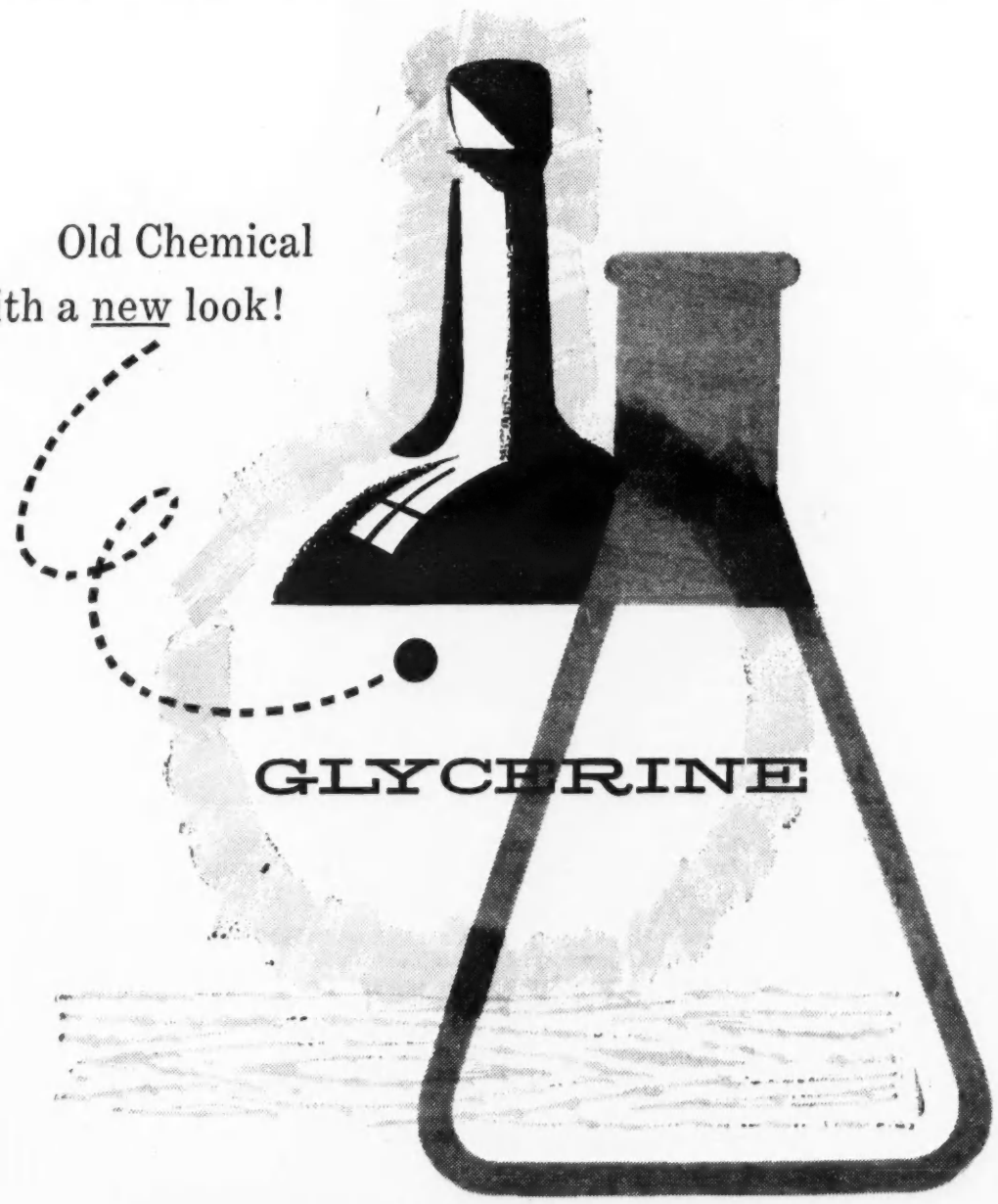
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt. alld. lb. 1.00 - 1.20
pure, bgs., c.l., frt. alld lb. .44¾ - —
l.c.l., same basis lb. .45½ - —
Dyes (see Dyes, coaltar).
Malachite, straight, PTMA, bbls., works lb. 4.60 - —
Paris (see Paris green).
Phthalocyanine toner, bbls., works, lb. 3.95 - —
resinated, bbls lb. 3.50 - —
water dispersable, bbls lb. 1.71 - —
Pigment B, kegs lb. 1.35 - —
paste, kegs lb. .38 - —
Grindelia robusta herb, bls lb. .38 - .40
Guaiacol, NF, cryst., dms., tins lb 2.10 - 2.15
liq., cbys., dms lb. 2.30 - 2.40
Carbonate, NF VII, dms lb. 3.40 - 3.45
Gum, aloe (see Aloe).
Arabic, amber sorts, bgs lb. .20 - .22
powd., USP, bbls lb. .26 - .28
Asafetida (see A).
Asphaltum (see A).
Benzoin, Sumatra, cs lb. .33 - —
Camphor (see C).
Cellulose, high vis., bgs., 23,000-lb lots or more, works, frt alld lb. .55 - —
smaller lots, same basis lb. .57 - —
Copal, Congo, No. 1, bgs. lb. .22½ - .25
No. 2, bgs. lb. .18½ - .20
No. 3, bgs. lb. .15¼ - .17
Manila, C, bgs lb. .36½ - .40
CBB, bgs. lb. No stocks.
DBB, bgs lb. .26¾ - .29
DK, bgs lb. No stocks.
dust, bgs lb. .14 Nom.
MA, soft, bgs lb. .18½ - .21
WS bgs lb. No stocks.
Philippine, pale, chips, bgs lb. .21½ - .24
nubs, bgs lb. .31¾ - .34
seeds, bgs lb. .20 - .22
sorts, bgs lb. .19¾ - .22
Pontianak, chips, bgs lb. .26 - —
nubs, bgs lb. .37¾ - .40
Dammar, Batavia, A/E, cs lb. No stocks.
dust, bgs lb. .16 - .18
E, bgs lb. .20 - .22
East India, batu, bold, bgs lb. .13½ - .15
nubs and chips, bgs lb. .08 - .09
black, bold, bgs lb. .14 - .16
unscraped, bgs lb. .11¾ - .13
nubs and chips, bgs lb. .11 - .13
pale, chips, bgs lb. .12¾ - .14
nubs, bgs lb. .17 - .19
Siam, cs lb. .36½ - .39
Singapore, No. 1, bgs lb. .44¼ - .46
No. 2, bgs. lb. .31¾ - .33
No. 3, bgs lb. No stocks.
dust, bgs. lb. .16¾ - .18
seeds, bgs lb .20 - .22
Gum, ester, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., Mich., Mid-Atl States, N. E States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W Va lb. .14½ - .16
Wood-rosin type, dms., c.l., same basis lb. .15 - .16
Guar, food grade, bgs lb. .50 - —
tech. grade, bgs lb. .40 - —
Karaya, No. 1, NF, powd., bbls lb. .50 - —
No. 2, powd., bbls lb. .35 - .38
No. 3, powd., bbls lb. .32 - .35
Locust bean, powd., bgs lb. .48 - .50
Myrrh, cs lb. .55 - —
Opium (see Opium)
Olibanum siftings, cs lb. .20 Nom.
tears, cs lb. .22 .30
Rosin (see Naval Stores, Protective Coatings Market)
Sterculia (see Gum Karaya).
Tragacanth No 1, ribbons, cs. lb. 4.50 - 4.70
No. 2, cs lb. 3.50 - 3.75
No. 3, cs lb. 3.25 - 3.40
powd., USP, bbls lb. 1.25 - 1.38
Gypsum, plaster of paris, 100-lb paper bgs, trucks, dlvd N Y C ton 20.30 - —
Terra alba, don. paper bgs., same basis ton. 20.00 - —
works N Y C ton. 17.00 - —
imp., English, 100-lb. paper bgs., ex dock, N. Y. C ton. 55.00 —
ex warehouse ton. 60.00 - 62.00

H

Hawthorn berries, bgs lb. .21 - —
Heliotropin, 100-lb lots, dms lb. 3.00 - 3.25
Hellebore root, dom., green bls lb. .70 - .75
Helonias root, bls lb. 1.75 - 2.00
Hematine extract, cryst., No. 1, bbls., l.c.l lb. .47 - —
No. 2, bbls., l.c.l lb. .43 - —
No. 3, bbls., l.c.l lb. .41 - —
No 4, bbls., l.c.l lb. .39 - —
No 5, bbls., l.c.l lb. .37 - —
paste, No. 1, bbls., l.c.l lb. .20½ - —
Henbane leaves, bls lb. .35 - .40
Heptane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .14¾ - —
Borger, Tex gal. .14¾ - —
Hesperidin, purif., 25 lb. lots, f.o.b., works lb 8.95 - —
Methylchalcone, bots., 50-lb lots, works lb. 22.50 - —
5-lb. lots, works lb. 23.00 - —
1-lb. lots, works lb. 23.50 - —
Hexachlorophene, dms lb 1.98 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb lots or more, Perth Amboy or N Y C lb. .222 - —
1,000-19,999-lb lots, same basis lb. .232 - —
smaller lots, same basis lb. .242 - —
fib dms., 1,000-lb lots or more, same basis lb. .239 - —
smaller lots same basis lb. .242 - —
USP, dms., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. N. Y. C. and Philadelphia lb. .40½ - —
smaller lots, same basis lb. .41½ - .46½
Hexane, indust., tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15½ - —
Borger, Tex gal. .15½ - —
1-Hexanol, dms., c.l., works lb. .35 - —
l.c.l., works lb. .35¾ - —
tanks, works lb .33 - —
Hexyl cinnamic aldehyde, dms lb. 4.00 - 7.50
Salicylate, dms lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd lb. .17 - —
l.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .14½ - —
a-Hexyl methacrylate, dms., less than truckload works lb. .71 - —
Hexylresorcinol, USP, dms., 50-lb lots or more, dlvd lb. 14.00 - —
smaller lots, dlvd lb. 44.50 - —
Homatropine hydrobromide, USP bots oz. 5.50 - —
Methylbromide, USP, bots oz. 3.90 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton 6.25 - —
Horehound herb, bls lb. .16 - .19
Hyoscyamine hydrobromide, bots. oz. 6.00 - 7.00
Sulfate oz. 6.75 - 7.25
Hydrastis (see Goldenseal).
Hydrazine, free base, ref. dms., works lb. No stocks.
Hydrate, 85%, ref. dms., works lb. 1.35 - 1.55
100%, ref. dms., works lb. 1.60 - 1.90
Hydrocortisone acetate, bulk, bots., up to 500 gms gm. 4.75 - —
Alcohol, bulk, bots., up to 500 gms gm. 4.75 - —
Hydrofuramide, dms., fib ctns., works lb. .30 - .40
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works lb. .45 - —
l.c.l., works lb. .55 - .60
Fluoride anhyd., cyls., dlvd. E lb. .30½ - .32¼
dlvd. W lb. .39 - —
tanks, works lb. .21 - —
Peroxide, USP, bbls., dlvd lb. .03¾ - .05
35%, dms., c.l., dlvd lb. .202 - —
l.c.l., dlvd lb. .211 - —
tanks, dlvd lb. .1300 - —
Hydroquinone, photo grade, bbls., dms lb. 1.03 - 1.06
tech., dms., c.l., dlvd lb. .82½ - —
l.c.l., dlvd lb. .84¼ - —
Hydroxycitronellal, cns lb. 6.00 - 7.45
Hyoscine salts (see Scopolamine)
Hyoscyamone hydrobromide, bots. oz. 6.00 - 7.00
oz. 6.00 - 7.00
Sulfate, bots oz. 6.75 - 7.25
Hypernic extract, cryst., No. 2, bbls., l.c.l lb. .52 - —
liq., No. 1, bbls., l.c.l lb. .35 - —
No. 2, bbls., l.c.l lb. .27 - —

I

Ichthammol, NF, jars lb. .75 - 2.57
Indian red (see Red, Indian).
Indigo (see Dyes, coaltar, 1171 Indigo synthetic).
Indole, CP, bots lb. 16.50 - 21.00
Inositol, bots., dlvd lb. 3.00 - —
dms., dlvd lb. 4.50 - 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs lb. 1.10 - —
resub., USP, dms., jars lb. 2.30 - 2.32
Iodochlorohydroxyquinolin, USP, dms lb. 3.90 - —
Iodoform, NF, dms., kgs lb. 4.90 - 5.00
a-Ionone, cns lb. 5.25 - 5.40
b-Ionone, cns lb. 5.40 - 5.70
Ipecac root, bgs., whole lb. 7.50 - —
powd., bbls., bxs lb. 7.85 - —
Irish moss, bleached, prime, bls lb. .28 - .34
Iron compounds (see Ferric or Ferrous).
Oxides (see under Black, Brown, Red, and Yellow).
Isoborneol, cns lb. 1.25 - 1.70
Isobornyl acetate, cns lb. .46 - .70
Formate, dms lb. .80 - —
Propionate, dms lb. 1.13 - 1.45
Isobutyl acetate, perfume grade, cns lb. .75 - 1.00
solvent grade, dms., c.l., dlvd. E. of Rockies lb. .14¾ - —
l.c.l., same basis lb. .15¾ - —
tanks, same basis lb. .12¼ - —



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Isobutyraldehyde, CP, dms., c.l., dlvd	lb.	.27½-	—
t.c.l., dlvd	lb.	.28½-	—
tech., dms., c.l., dlvd	lb.	.21½-	—
l.c.l., dlvd	lb.	.22½-	—
tanks dlvd	lb.	.19½-	—
Isoeugenol, cns	lb.	3.60	4.40
Isoniazid, powd., bulk, 25-kilo lots or more	kilo.	23.00	25.50
smaller lots	kilo.	24.00	26.00
Isopentane, coml. grade, tanks, f.o.b. Tex, refy gal.		.15½-	—
Isonicotinic acid hydrazide (see Isoniazid).			
Isophorone, dms., c.l., works	lb.	.24½-	—
l.c.l., works	lb.	.25¼-	—
tanks, works	lb.	.22½-	—
Isopropanol (see Alcohol, isopropyl).			
Isopropyl acetate dms., c.l., dlvd.	lb.	.15½-	—
t.c.l., same basis	lb.	.14½-	—
tanks, same basis	lb.	.11	—
Alcohol (see Alcohol, isopropyl).			
Benzene (see Cumene).			
Ether dms., c.l., dlvd	lb.	.07	—
t.c.l. dlvd	lb.	.08	—
tanks, dlvd	lb.	.05	—
Isopropyl-N-(3-chlorophenyl) carbamate, (CIPC), 70% in xylol, dms., c.l. t.l. works	lb.	.70	—
t.c.l., works	lb.	.714	.814
Isopropylamine (see Mono, Di, or Tri-).			
Isopropyl-N-phenyl carbamate, 450-lb fib dms. c.l. t.l., works.	lb.	.75	—
t.c.l. works	lb.	.80	.90
Isoquinoline dms., works	lb.	.65	1.25

J

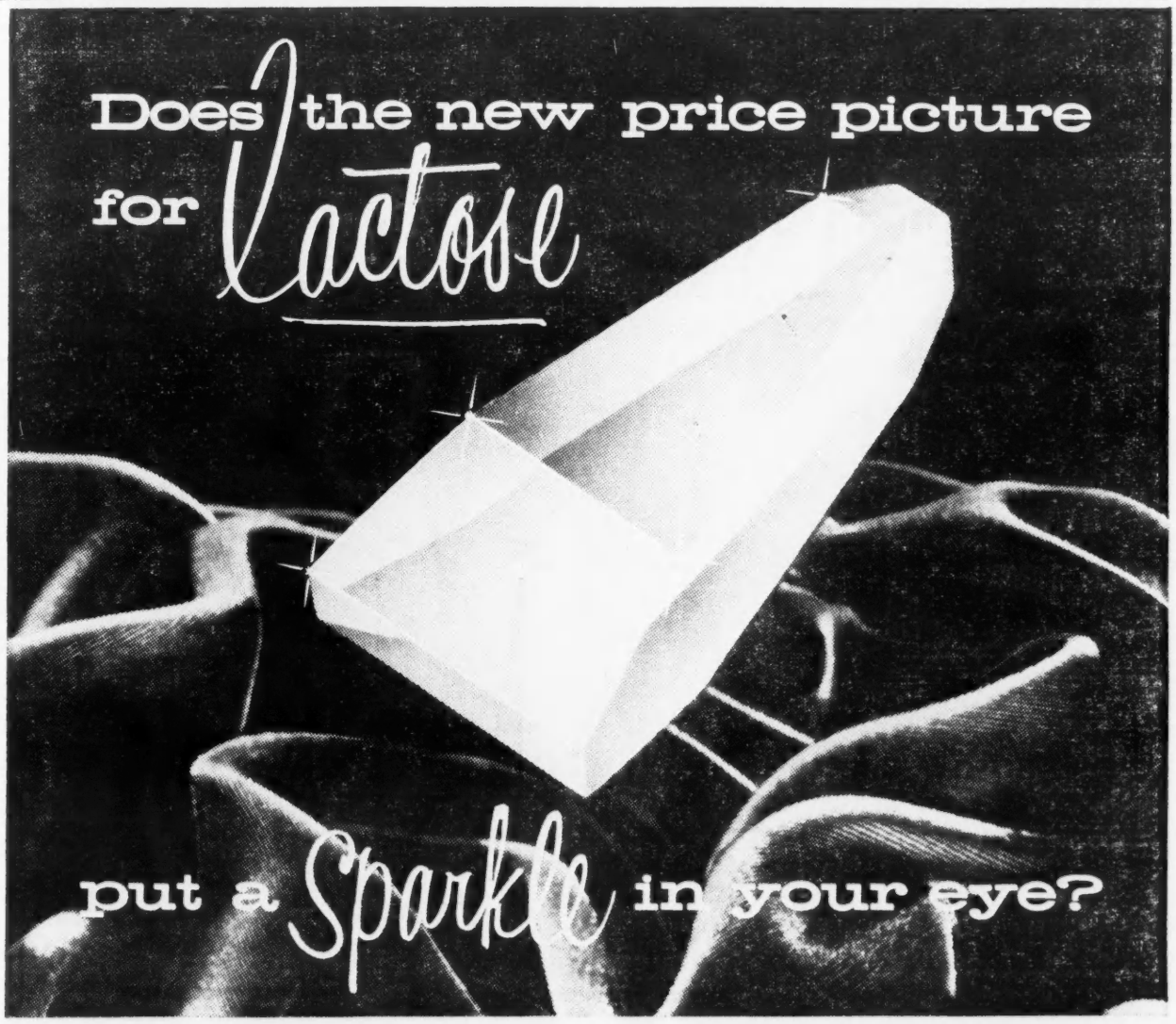
Jalap root, NF, bls	lb.	NP	—
powd., bbls., bxs.	lb.	NP	—
Juniper berries, bgs	lb	.18	.20
Tar NF dms	lb	.42	.60

K

Kaolin (see also Clay China).			
NF powd. fib dms	lb.	.10	.12
colloidal fib. dms.	lb.	.15½-	.17½
Kola nuts bgs	lb.	.15	—

L

Lactose edible fib dms., 30,000-lb. lots, works	lb.	.15	.15½
2,000-lb lots, works	lb.	.15¾-	.16½
200-1,800-lb. lots works	lb.	.16¾-	.17
Edible lactose in bgs ½c lower.			
Fermentation grade, bgs., c.l., works	lb.	.08½-	—
USP fib dms., 30,000-lb. lots, works	lb.	.21½-	—
2,000-lb. lots, works	lb.	.22¼-	—
200-1,800-lb. lots, works	lb.	.22¾-	—
USP lactose in bgs 1c lower.			
Lanolin, cosmetic, dms., works	lb.	.27	.29
USP, anhyd., dms., works	lb.	.25	.27
hydrous, dms., works	lb.	.24	.26
Lard, cash, dms., Chicago	lb.	.1400-	—
Larkspur seed, bgs	lb.	.25	—
n-Lauryl methacrylate, dms., c.l. or t.l. works	lb.	.65½-	—
Lavender flowers, medium bls	lb.	.75	.80
crd., bls	lb.	.25	.40
select bls	lb	.90	—
Lead acetate, white, cryst., bbls.	lb.	.25½-	—
gran., bbls	lb.	.26½-	—
powd., bbls	lb.	.26½-	—
NF, cryst., gran., powd	lb.	.36½-	—
Arsenate, acid, powder, dealers, 3-lb bgs or larger, c.l., frt alld on 96 lbs. or more	lb.	.27½-	—
t.c.l., frt alld	lb.	.28½-	—
1-lb bgs., c.l.	lb.	.41½-	—
l.c.l.	lb.	.42½-	—
Blue, basic sulfate, bbls., c.l., shipt point, frt alld	lb.	.17¼-	—
t.c.l., same basis	lb.	.18¼-	—
Carbonate (see Lead, white, basic carbonate).			
Chloride dms	lb.	.45	—
Iodide NF V jars	lb.	3.92	—
Linoleate fused 26%% Pb, dms.	lb.	.33	—
Metal pigs prime, N Y	lb.	.16	—
St Louis	lb.	.1580-	—
Metallic paste, dms., 20,000-40,000-lb. lots, works	lb.	.33¾-	—
10,000-20,000-lb lots, same basis	lb.	.34¾-	—
200-2,000-lb. lots, same basis.	lb.	.35¾-	—
Prices ex whse. Jersey City, N J., 4½c per lb higher			
Monosilicate, bgs., c.l., works, frt equald	lb.	.20	—
t.c.l. same basis	lb.	.2075-	—
Naphthenate, liq., 16% Pb., dms., dlvd	lb.	.17	—
24% Pb. dms., dlvd	lb.	.21	—
solid, 37% Pb., dms., dlvd	lb.	.27½-	—
Nitrate, bbls	lb.	.23¾-	—
Orthosilicate-silica gel, 50-60% PbO dms. works	lb.	.29¾-	.34¼
Peroxide tech., powd. bbls	lb.	.38¾-	.40¼
Phthalate, dibasic, dms., works	lb.	.41	—
Red 95% Pb_3O_4, or less, bbls., c.l., works, frt. alld	lb.	.19	—
t.c.l., same basis	lb.	.20	—
97% Pb_3O_4, bbls. c.l., same basis.	lb.	.192	—
t.c.l., same basis	lb.	.202	—
98% Pb_3O_4, bbls. c.l., same basis.	lb.	.1933-	—
t.c.l., same basis	lb.	.2033-	—
Resinate, precip., 23% Pb, dms., dlvd	lb.	.32½-	—
Salicylate normal, dms. works.	lb.	.46	—
Silicate (see Lead, white, basic, silicate)			
Sulfate (see Lead, blue, basic sulfate Lead white basic sulfate)			
Tallate, liq., 16% Pb, dms	lb.	.15	—
24% Pb., dms	lb.	.18¼-	—
solid, 30%	lb.	.23¼-	—
White, basic carbonate, bgs., c.l., shipt point, frt alld	lb.	.19	—
t.c.l., same basis	lb.	.20	—
silicate, bgs., c.l., shipt. point, frt. alld	lb.	.17¼-	—
t.c.l., same basis	lb.	.18¼-	—
sulfate bgs. c.l., shipt. point, frt. alld	lb.	.17¼-	—
t.c.l., same basis	lb.	.18¼-	—
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works	lb.	.14	.15
t.c.l., same basis	lb.	.16	.17
unbleached, non-ret. dms., c.l., same basis	lb.	.13	.14
t.c.l., same basis	lb.	.15	.16
Lemon bioflavonoid complex, 25-lb. lots, works	lb.	9.00	—
dl-Leucine, dms. works	lb	12.23	15.00
Licorice root, whole, bbls	lb.	.10	.12
gran., bbls	lb.	.15	.17
powd. bbls	lb	.12	.15
Lignosulfonate, 70% tannin, bgs., c.l., works	lb.	.06½-	—
t.c.l., works	lb.	.06¾-	—
Lime, chemical (quicklime), bulk, c.l., metropolitan N. Y. destination, freight equalized with nearest producing point	ton.	20.46	—
Hydrated, bulk, c.l., same basis.	ton.	21.96	—
Spray, bgs., c.l., same basis	ton.	25.96	—
Lime salts (see Calcium).			
Lime-ammonium nitrogen 20.5% N (see Ammonium nitrate with dolomite).			
Limestone grd., bgs., works	ton.	3.50	4.00
Linalool, ex bois de rose oil, dms.	lb.	3.65	4.80
ex lignaloe wood oil, dms	lb.	5.30	7.10
Linalyl acetate ex bois de rose, 90-92%, dms	lb.	3.30	5.10
96-98%, dms	lb.	4.05	6.75
ex petitgrain, bots	lb.	4.80	5.90
Lindane, 25% formulation, dealers, dms., frt. alld	lb.	1.38	1.68
99%, tech., formulators, dms., frt. alld	lb.	2.65	3.25
Linden flowers with leaves, bls.	lb.	.23	—
without leaves, bls.	lb.	.30	—
Linseed meal, expeller, 32-34% bulk, Midwest, mills	ton.	60.50	—
extracted, 36% bulk, same basis.	ton.	51.00	51.50
Litharge, coml., powd., bbls., c.l., works, frt. equald	lb.	.18	—
l.c.l., same basis	lb.	.19	—
Lithium benzoate, dms	lb.	1.65	1.67
Bromide, NF, dms., works, frt. equald	lb.	2.45	—
Carbonate, NF, dms., c.l., t.l., dlvd	lb.	1.29½-	—
ton lots to t.l., dlvd	lb.	1.30	—
tech., dms., c.l., t.l., dlvd., frt, alld, works	lb.	.82	—
t.c.l., same basis	lb	.85	1.11½
Chloride, CP, anhyd., ton lots tech., annyd., dms., c.l., t.l., dlvd., or works, frt. alld.	lb	1.23½-	—
	lb	1.00	1.03
t.c.l., same basis	lb	1.05	1.05½



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Fluoride, bbls., 10,000-lb. lots, dlvd lb 2.17½- —
ton lots, dlvd ..... lb 2.18½- —
less ton lots, dlvd ..... lb 2.23½- —
Hydride powd., dms., 500-lots, works lb.10.50 -12.50
Hydroxide, monohydrate, dms., c.l., t.l., dlvd or works, frt. alld lb. .80 - .80½
l.c.l. same basis lb .81 .81½
Manganite, dms., works lb .95 1.15
Nitrate, tech. dms. 100-lb. lots. lb 1.25 —
Salicylate, dms. lb 1.60 - 1.70
Silicate, dms., works ..... lb 1.10 - 1.30
Stearate, dms., c.l works ... lb. .47½- —
ton lots, works ..... lb. .48½- —
less-ton lots, works ..... lb .53½- —
Sulfate, dms., 100-lb. lots .... lb. 1.15 —
Titanate dms. works ... lb 1.25 1.35
Lithopone, ord., bgs., c.l., dlvd. E. lb. .08 —
l.c.l., dlvd E ..... lb. .08¾- —
Lobelia herb bls lb 1.50
Lobeline sulfate, bots., works oz.37.50 -38.50
Logwood extract cryst. No 1, bbls., l.c.l lb. .41 —
No. 2, bbls., l.c.l. ..... lb. .39 - —
liq., No. 1, bbls., l.c.l..... lb. .20 - —
No 2, bbls., l.c.l ..... lb. .19 - —
No 3, bbls., l.c.l ..... lb. .18½- —
solid No 1, boxes, c.l. .... lb. .35 —
Lycopodium, cs lb 1.20 2.00
dl-Lysine monohydrochloride, fib. dms. lb.12.00 - —
l-Lysine, fib, dms..... lb.12.00 -13.00

M

Mace, Siauw, siftings, bls..... lb. 3.25 - —
West Indian, No. 1, bls. shipment lb. 3.25 - —
Magnesia, calcined, tech., bgs., etns., works lb. .25¼- .26
syn. rubber grade, light, bgs., c.l., works lb. .29¼- —
extra light, bgs., c.l., works, lb. .29¼- .30
t.c.l., works..... lb. .30 - —
USP, light, bgs ..... lb. .35 - .36
heavy, fib, dms..... lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald ton.82.50 - —
dead-burnt standard grain, bulk, c.l., Chawelah, Wash ton.40.00 - —
Magnesium bromide jars ... lb. .90 1.00
Carbonate, tech., bgs., c.l., frt. equald lb. .10½- —
t.l., frt. equald ..... lb. .11 - —
l.c.l., frt. equald ..... lb. .12 - .13
USP, bgs., c.l., frt. equald... lb. .12½- —
t.l., frt. equald ..... lb. .13 - —
l.c.l., frt equald lb .14 .15
Above prices are quoted f.o.b. works, freight equalized with metropolitan New York and competitive producing points.
Chloride, anhyd., 92% flake or pebble, dms., c.l., works lb. .12¾- —
t.c.l., works..... ton.65.00 -80.00
Gluconate, dms. cns..... lb. 1.34 - 1.41
Magnesium hydroxide, NF, medicinal., bbls., dms., kgs..lb. .26½- .30
Metal, 99.8% ingots, 10,000 lb. lots or more, works..... lb. .36 - —
pigs, 10,000-lb. lots or more, works..lb. .35¼- —
sticks, cs., works, frt. alld, on carlots..lb. .59 - —
Oxide (see Magnesia, calcined).
Nitrate, cryst., dms., works....lb. .20 - —
Peroxide, 15%, dms., works....lb. 1.00 - 1.05
Phosphate, tribasic, NF, bbls..lb. .75 - —
Silicate (see Talc).
Silicofluoride, dms., works.....lb. .10½- .12
Sulfate, tech., bgs., c.l., works, t.c.l., same basis lb. .14 - .15
hydrous, 99% flake, bgs., c.l., works ton.55.00 - —
100 lbs. 2.15 - —
t.c.l., works.....100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
t.c.l., 5,000 lbs., 1 withdrawal..100 lbs. 3.10 - —
smaller lots.....100 lbs. 3.35 - —
Trisilicate, USP, dms., 5,000-lb. lots..lb. .38 - —
1,000-lb. lots.....lb. .40 - —
100-lb. lots..... lb. .45 - —
Bulky and super grades of magnesium trisilicate, 7c. per lb. higher
Malathion, dms., c.l., works.....lb. .90 - —
l.c.l., works.....lb. .92 - 1.02
Maleic anhydride, dms., c.l., dlvd, E..lb. .27 - .28½
l.c.l., dlvd, E.....lb. .28 - .29½
tanks, dlvd, E.....lb. .26 - .27½
Prices on maleic anhydride W. of Rockies, 1½c. higher.
Mandrake root bls .....lb. .55 - .60
Manganese acetate, bbls., dlvd lb. .38 - —
Arsenate, bgs .....lb. .16 - —
Borate, tech., fib. dms .....lb. .25 - —
Carbonate, bbls., works lb. .22 - —
Chloride, anhyd., dms., works lb. .25½- —
Dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined, bgs., gross for net, works..ton.148.00 - —
paper bgs., works...ton.144.50 - —
dms., works.....ton.152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher
Gluconate, dms .....lb. 1.80 - 1.94
Hydrate, bbls. dlvd lb. .36 —
Hypophosphite, NF, dms lb. 3.52 —
Linoleate, liq., 4.35% Mp, dms lb. .32½- —
solid, precip, 8.2% Mn bbls lb. .37½- —
Naphthenate, liq., 6% Mn., dms., frt. alld..lb. .27 - —
Resinate, fused 3½% Mn. dms. lb. .24 - —
precip., 6½-7% Mn dms lb .28 - —
Sulfate, fertilizer grade, 65% sulfate, c.l., dlvd, S. E...ton.88.35 - —
l.c.l., dlvd, S E .....ton.95.55 - —
Tallate 6%, dms lb .24 —
Mangrove bark, E. African, 38% tannin, c.l., ex dock ton.66.00 - —
So. American 30% tannin, c.l., ex dock ton.55.00 -58.00
Mannitol, com'l, fib dms., ton lots, works lb. .60 - —
dms. to ton lots, works lb. .62 - —
single dm., works lb. .65 - —
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works .... lb. .30 - —
l.c.l., works ..... lb. .31 - —
Menadione, USP bots gram .044 - .05
Menthol, nat., USP, Brazilian, cs..lb. 6.40 - 6.50
syn., USP racemic, cns lb. 4.95 - —
Menthyl salicylate, tins lb 4.00 4.25
2-Mercaptobenzothiazole, bgs., fib. dms. ton-lots works, frt. alld lb. .42 - —
less ton lots, same basis lb. .44 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton-lots works, frt. alld lb. .52 - —
less ton lots, same basis lb. .54 - —
Mercuric chloride, NF, cryst., dms., 50-lb lots or more lb. 4.98 - —
gran. or powd., dms., 50-lb. lots or more lb. 4.78 - —
Cyanide, NF, VIII, powd., fib. dms. lb. 6.84 - —
Iodide, red, NF fib dms lb 7.72 - —
Oxide, red, NF, powd., fib. dms lb. 5.97 6.01
Yellow, tech. (see Yellow mercury oxide).
USP, fib. dms..... lb. 6.14 - —
Mercurous chloride (see Calomel).
Iodide, yellow, NF..... .....lb. 7.72 - —
Mercury, ammoniated (see White precipitate USP).
Metal, 76 lb. per flask..net-flask.255.00 -257.00
Mesityl oxide, dms., c.l., dlvd....lb. .14½- —
l.c.l., dlvd.....lb. .15½- —
tanks, dlvd.....lb. .12 - —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanitroaniline (see m-Nitroaniline).
Metanitroparatoluidine (see m-Nitro-p-toluidine).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methanol, nat., denaturing grade, tanks, frt. alld gal. .75 - —
syn., Zone 1, dms. c.l. dlvd. or truckload min frt alld. gal. .46 - —
l.c.l., same basis ....gal. .53 - —
tankwagon, 2,000-4,000 gal. lots, dlvd Metropolitan area gal. .33 - —
4,000 gal. min., frt. alld. or dlvd gal. .30 - —
4,000 gal., min., works, Carteret, Camden, N. J gal. .27½- —
Zone 2, dms. c.l., or truckload min. frt. alld. or dlvd..gal. .49 - —
l.c.l., same basis .....gal. .56 - —
tankwagon, 2,000-4,000-gal. lots, min. dlvd Metropolitan areas gal. .36 - —
tanks, 4,000 gal., min., frt. alld. or dlvd..gal. .33 - —
Synthetic methanol zones are:—Zone 1 is all continental U. S. E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of U. S. west of above state boundaries comprising Ariz. Calif. Idaho. Nev., Ore., Utah and Wash.
Methenamine (see Hexamethylenetetramine).
dl-Methionine, fib. dms., frt. alld. 50-lb or more lb. 3.50 - —
feed grade, 98% fib. dms., same basis lb. 2.65 - —
Methoxychlor, 50% wettable powder, dealers, dms., cs., frt alld lb. .61 .64
Methyl abietate, non-ret., dms., c.l., dlvd zone 1 lb. .20½- —
l.c.l. same basis lb. .21 - —
hydrogenated, non-ret., dms., c.l., dlvd, Zone 1..lb. .21 - —
l.c.l. same basis lb. .21½- —
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich. Ind. Ill. Wis. St. Paul and Minneapolis, Minn.; St. Louis Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Acetone, nat., dms., l.c.l., E. of Miss., frt. alld..gal. .62½- —
syn., dms., c.l. frt. alld. E gal. .63½- —
l.c.l., frt. alld. E .....lb. .69½- —
tanks, frt alld. E .....gal. .48½- —
Synthetic methyl acetone E. territory is all States East of and including Colo., Mont., N. Mex. and Wyo. West territory all states west of those four.
Acrylate, dms. c.l., t.l., dlvd. lb. .39 - —
l.c.l., dlvd .....lb. .40 - —
tanks, dlvd .....lb. .37 - —
Alcohol (see Methanol).
Amyl acetate dms c.l., dlvd. E. lb. .16 - —
l.c.l. dlvd E .....lb. .17 - —
tanks, dlvd E .....lb. .13½- —
Ketone, dms. works.....lb. 1.05 —
Anthranilate, cns .....lb. 2.35 - 2.65
Benzoate, cns., dms .....lb. .60 .75
Bromide, jobbers, cyls., various sizes, frt alld. E lb. .47 .61
Cellulose, special vis. (1,500-4,000 cps.), 50 lb. bgs, c.l., works lb. .78 - —
2,000-lb. lots and more, same basis lb. .65 - —
smaller lots, frt. alld. on 100 lbs. lb. .89 1.00
standard vis. (15,400 cps.), 50-lb. bgs., c.l., frt. alld..... lb. .60 - —
2,000-lb lots and more, same basis lb. .72 - —
smaller lots, frt. alld. on 100 lbs lb. .75 .85
Chloride, indust., cyls., frt. equald. lb. .22 - —
tanks, multi-unit, same basis. lb. .15¾- —
single unit, same basis lb. .12 - —
refrigerator mfrs., cyls., dlvd.lb. .46 .48
other consumers or service men, cyls., dlvd lb. .67 - —

versatile

CSC emulsifier

and chemical

intermediate

•

$CH_3C(CH_3)NH_2CH_2OH$

AMP

2-AMINO-2-METHYL-1-PROPANOL

use AMP as an emulsifier

AMP oleate is an economical emulsifier in water-wax emulsions. That's because AMP oleate is effective in lower concentrations than are required for comparable performance with other amine soaps. Emulsions made with relatively low concentrations of AMP oleate are stable and unchanged after repeated freeze-thaw cycles and heat stability tests. In properly formulated floor wax emulsions, AMP oleate imparts high gloss and excellent leveling characteristics.

The higher fatty acid soaps of AMP are powerful emulsifying agents in cleaners, polishes, dressings, self-polishing floor waxes, and emulsion-type paints. Evaporation loss and objectionable fumes are minimized during emulsion manufacture, due to AMP's relatively high boiling point. Films deposited from AMP-made emulsions have excellent water resistance and durability.

use AMP as a chemical intermediate

AMP forms substituted amides with esters, anhydrides, and acyl halides. AMP also reacts with alkyl halides, aldehydes, ketones, carbon disulfide, and many other compounds. These reactions suggest the use of AMP in the synthesis of surface-active agents, detergents, and vulcanization accelerators for rubber.

PHYSICAL PROPERTIES

Molecular Weight	89.14
Boiling Point, at 760mm	165°C
Melting Point	30-31°C
Specific Gravity at 20/20°C	0.934
pH of 0.1M Aqueous Solution at 20°C	11.3
Solubility	Miscible with water; aromatic hydrocarbons, alcohols, esters. Insoluble in aliphatic hydrocarbons.

SPECIFICATIONS

Neutral Equiv.	88.5-91.0
Color, APHA, max.	20
Water, by wt., max.	0.8%
Distill. Range	156°C-177°C
Below 161°C, max.	10%
Above 168°C, max.	5%
Odor	Characteristic
Non-volatile matter by weight, max.	0.005%

OTHER AMINOHYDROXY COMPOUNDS

AMPD (2-Amino-2-methyl-1, 3-propanediol) $CH_2OHC(CH_3)NH_2CH_2OH$

AEPD (2-Amino-2-ethyl-1, 3-propanediol) $CH_2OHC(C_2H_5)(NH_2)CH_2OH$

TRIS AMINO (Tris [hydroxymethyl] aminomethane) $(CH_2OH)_3CNH_2$

AB (2-Amino-1-butanol) $CH_3CH_2CHNH_2CH_2OH$

AMP is another important chemical derived from CSC's Nitroparaffins. For samples and additional information write to:

COMMERCIAL SOLVENTS CORPORATION

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IN CANADA: Reliance Chemicals, Ltd., Montreal. IN MEXICO: Comsolmex, S.A., Mexico 11, D. F.

CSC INDUSTRIAL CHEMICALS

Methyl chloroform (see 1,1,1-trichloroethane).
Cinnamate, cns ..... lb. 1.55 - 1.80
Cyclohexanol, dms., c.l., works lb. .35½ - —
l.c.l., works ..... lb. .36 - —
tanks, works ..... lb. .34 - —
Ethyl ketone, dms., c.l., dlvd. lb. .14½ - —
l.c.l., dlvd ..... lb. .15½ - —
tanks, dlvd ..... lb. .12 - —
Formate, refd., dms ..... lb. .35 - .40
tech., non-ret. dms., any quantity, works lb. .10 - —
Heptin carbonate, bots ..... lb. 31.00 - 42.00
p-Hydroxybenzoate, fib dms lb. 1.90 - 2.00
Ionone, standard, cns., dms. lb. 5.00 - 5.25
Isobutyl carbinol, dms., c.l., dlvd. lb. .16½ - —
l.c.l., dlvd ..... lb. .17½ - —
tanks, dlvd ..... lb. .14 - —
ketone, dms., c.l., dlvd ..... lb. .16½ - —
l.c.l., dlvd ..... lb. .17½ - —
tanks, dlvd ..... lb. .14 - —
Methacrylate, dms., c.l., t.l., frt. equald, with Melle, W. Va. lb. .31 - —
smaller lots, same basis ... lb. .31½ - —
tanks, same basis ..... lb. .29 - —
Naphthyl ketone, cryst., cns lb. 3.00 - 4.30
Parahydroxybenzoate (see Methyl p-Hydroxybenzoate)
Roseaniline chloride, NF, fib. dms., 5-lb. dms. ..... lb. 6.54 - —
Salicylate, USP cns., 500-lb. lots lb. .59 - —
Testosterone USP, 100-gram bots. gram .63 - —
2-Methylbenzylamine, dms., l.c.l. works lb. 1.25 - —
2-Methylbenzyl dimethylamine, dms., c.l., works lb. 1.89 - —
l.c.l., works ..... lb. 1.90 - —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .445 - —
l.c.l., works ..... lb. .45 - —
tanks, works ..... lb. .43 - —
Methylene blue, fib. dms., 100-lb. lots frt. adjusted lb. 3.40 - —
Chloride, tech., dms., c.l., dlvd. E. lb. .13¼ - —
l.c.l., same basis ..... lb. .16 - —
tanks, same basis ..... lb. .11¾ - —
b-Methylnaphthalene, 32°C. m.p., dms., works lb. .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-Phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint plastic, 100 mesh, bgs., c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
wet-grd., biotite, bgs., c.l., works, frt alld E lb. .06½ - —
l.c.l., ex-whse lb. .07¼ - —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E lb. .08¼ - —
l.c.l. ex-whse or frt. alld. E lb. .09 - —
rubber, bgs., c.l., works, frt. alld. E lb. .08 - —
l.c.l., ex-whse or frt alld. E lb. .08¾ - —
wallpaper, bgs., c.l., works, frt. alld. E lb. .08¾ - —
l.c.l. ex-whse or frt alld. E lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼ - —
l.c.l. ex-whse or frt. alld. E lb. .09 - —
Mica, wet-grd. W of Miss. ½c. higher; W of Rockies 1c higher
Mineral spirits (see Petroleum mineral spirits).
Molasses, blackstrap feed grade, tanks, New Orleans gal. .28 - —
New York ..... gal. .29 - —
Molybdenum (metal), powd., 80 or 200 mesh ctns. works kilo. 7.84 - —
325 mesh, ctns. works kilo. 9.13 - —
Trioxide, pure, dms., works ... lb. 1.15 - —
tech. dms. works, basis Mo. content lb. 1.39 - —
Monobutylamine, dms., c.l., E. of Rockies lb. .53½ - —
l.c.l., same basis ..... lb. .56½ - —
tanks, same basis ..... lb. .53 - —
Monochlorobenzene, dms., c.l., frt. alld or dlvd. E lb. .10 - —
l.c.l. same basis ..... lb. .11 - —
tanks, same basis ..... lb. .08½ - —
Monoethanolamine dms., c.l., dlvd. E lb. .27½ - —
l.c.l. same basis ..... lb. .28½ - —
tanks, same basis ..... lb. .25 - —
Monoethylalphanapthylamine (see N-Ethyl-a-naphthylamine)
Monoethylamine 70% contained amine, dms., c.l., dlvd. E lb. .37½ - —
l.c.l., dlvd E ..... lb. .38½ - —
tanks, dlvd E ..... lb. .35 - —
Monoethylaniline (see N-Ethylaniline)
Monoethylorthotoluidin (see N-Ethyl-o-toluidine).
Monoisopropanolamine dms., c.l., dlvd. E lb. .27½ - —
l.c.l., same basis ..... lb. .28½ - —
tanks, same basis ..... lb. .25 - —
Monoisopropylamine dms., c.l., dlvd. lb. .32½ - —
l.c.l., same basis ..... lb. .33½ - —
tanks, same basis ..... lb. .30 - —
Monomethylamine, 30-35% soln., dms., c.l., frt. equald, 100% basis. lb. .40 - —
l.c.l. frt. equald 100% basis. lb. .40½ - —
tanks frt. equald 100% basis. lb. .31 - —
Monomethylamine, 40% soln., dms., frt. equald., 100% basis. lb. .37 - —
l.c.l. frt equald 100% basis. lb. .37½ - —
tanks frt equald 100% basis. lb. .31 - —
Monosodium fluoroacetate (see Sodium fluoroacetate monobasic).
Glutamate (see Sodium glutamate monobasic)
Phosphate (see Sodium phosphate monobasic).
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m cresol)
Morphine cns ..... oz. 12.40 - 12.60
Acetate anhyd. cns ..... oz. 9.95 - 10.00
Hydrobromide, cns ..... oz. 9.90 - 9.95
Hydrochloride, NF cns ..... oz. 9.90 - 9.95
Sulfate USP cns ..... oz. 9.90 - 10.05
Morpholine, dms., c.l., dlvd E ... lb. .55¼ - —
l.c.l., dlvd E ..... lb. .56¼ - —
tanks, dlvd E ..... lb. .52¾ - —
Musk, syn. ambrette, 100-lb. lots, fib. dms lb. 4.45 - 5.15
25-lb. lots cns ..... lb. 5.05 - 5.65
5-lb. lots, cns ..... lb. 5.20 - 5.50
ketone, 100-lb lots, fib. dms lb. 4.70 - 5.30
25-lb lots cns lb. 5.35 - —
5-lb lots, cns lb. 5.45 - —
xylol, 100-lb lots, fib. dms lb. 1.40 - —
25-lb lots cns lb. 1.45 - —
5-lb lots cns lb. 1.50 - —
Mustard seed, Danish, yellow, bgs lb. 10½ - —
Du ch, bgs. ..... lb. .10½ - —
English, yellow, bgs. ..... lb. .11 - —
Montana, oriental, bgs .... lb. .08½ Nom.
Yellow, bgs ..... lb. .10½ - —
Myrobalans, J-1, genuine, bgs., ex-dock ton 63.00 - 64.00
crushed, bgs ex dock ton 79.00 - 80.00
Bombay, bgs. ex dock ton 61.00 - 62.00
Extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty lb. .10 - .10¼

N

Naphtha, painters (see Petroleum naphtha V. M. & P.).
Solvent (see S)
Naphthalene, crude, dom., 74°, tanks, frt. equald lb. .06¼ - —
78°, bgs., c.l., same basis lb. .07½ - .08
l.c.l., same basis ..... lb. .07¾ - .08¼
tanks, same basis ..... lb. .07 - —
imp., 78°, bgs., large lots .... lb. .05 Nom.
refd., indust., chipped, crushed, bgs., frt. alld. lb. .12½ - —
tanks, same basis ..... lb. .11¾ - —
balls, flakes, wholesalers, jobbers, bbls., c.l., same basis, lb. .15½ - —
cs., 50 lbs., c.l., same basis lb. .15¾ - —
1-lb. pkgs., c.l., same basis. lb. .18½ - —
a-Naphthol, bbls., frt. alld ..... lb. 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 - —
l.c.l., works ..... lb. .35 - —
Benzoate, fib. dms., works ..... lb. 3.00 - —
custom contract, works .... lb. 1.65 - —
Salicylate, dms ..... lb. 5.00 - —
Sulfate, cns ..... lb. 35.00 - —
a-Naphthylamine, bbls. frt. alld lb .50 - —
b-Naphthylamine, tech., flake, bbls., works lb. 1.60 - —
Neocinchophen, USP dms., frt. adjusted lb. 7.00 - 8.00
Neomycin sulfate, fib. dms., 5 kilo lots, basis, activity ..gram, .45 - —
100-999 gram lots, basis, activity, gram, .53 - —
Nerolin, cns ..... lb. 2.45 - 2.65
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd ..... lb. 77 - .90½
Carbonate, bbls. dlvd ..... lb. 73¾ - 81¾
Chloride, bbls., dlvd ..... lb. 38½ - 46½
Formate, bbls., ton lots, frt. alld lb. .68 - .69
Metal, electro cathodes, cs., works lb. .74 - —
Nitrate, bbls., works ..... lb. .37 - .38
Oxide, black, bbls ..... lb. 76 - —
green, bbls. ..... lb. 78 - —
Sulfate, bgs., c.l., dlvd ..... lb. .30¼ - —
l.c.l., dlvd ..... lb. .31¼ - .38¼
Nicotinamide, USP, dms., frt. adjusted kilo 12.00 - 12.30
Hydrochloride dms. frt adjusted. kilo 11.50 - 11.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld ..... lb. 1.20 - —
manufacturers, 500-lb. dms., frt. alld lb. 1.03 - —
Niger seed, bgs ..... lb. .12 - .12½
Nikethamide, cbys ..... lb 7.50 - —
m-Nitroaniline cryst. dms. frt. alld. lb. 1.15 - —
paste, dms., frt. alld.. 100% basis. lb 1.10 - —
o-Nitroaniline, flaked, dms., t.l., frt. alld lb. .49 - —
l.t.l., frt. alld ..... lb. .51 - —
p-Nitroaniline, dms., frt alld lb. .445 - —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld. lb. .14 - —
l.c.l., frt. alld ..... lb. .15 - —
tanks, frt. alld ..... lb. .12 - —
Nitrocellulose, ester soluble, 30-35 cps., ¼, ½ sec., 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l., works lb. .34 - —
l.c.l., same basis ..... lb. .35 - .37
18-25 cps. bbls., c.l., same basis lb. .36 - —
l.c.l. same basis ..... lb. .37 - .39
250-400, 600-1,000 secs., bbls., c.l., same basis lb. .39 - —
l.c.l., same bassi ..... lb. .40 - .42
spirit-soluble, 30-35 cps., ¼, ½, secs., bbls., c.l., same basis lb. .41 - —
l.c.l., same basis lb. .42 - .44
5-6 cps., 40-60 secs. bbls., c.l., same basis lb .40 - —
l.c.l., same basis lb .41 - .43
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable
o-Nitrochlorobenzene dms. c.l., frt. alld lb. .15 - —
l.c.l. same basis ..... lb .16 - —
tanks, same basis ..... lb. .13 - —
p-Nitrochlorobenzene dms ... lb .26 - .27
2-Nitro-4-chlorophenol dms lb. 73 - —
N-oethane dms. c.l. dlvd. E lb .24 - —
l.c.l., dlvd E lb. .24¾ - —
tanks, dlvd E lb. .22½ - —
Nitroethane prices West of Rockies are 1c higher
Nitrogen solutions, tanks frt. equald. unit. 1.14 - —
Nitrogenous process tankage, bulk works unit-ton 3.00 - 4.00
Sewage sludge, bulk, works, unit-ton. 2.95+ - .50

For liquid detergent formulations

try the raw material with the world's best references

NEOLENE 400

Neolene 400 is an established high-quality hydrocarbon that has earned a key position, not only with the world's foremost processors, but also with smaller compounders everywhere. Sulfonates produced from Neolene 400 are particularly well suited for compounding in liquid formulations. Latest sulfonation method, using SO_3 with Neolene 400, contributes to quality and production efficiency in liquid formulations. This procedure does away with handling, storing and disposing of spent sulfuric acid.

In addition to Neolene 400, you can count on Conoco for:

WATER-SOLUBLE SULFONATES—produced from Neolene 400. Available as sulfonate slurry, sulfonic acid, or in spray-dried and drum-dried forms.

OIL-SOLUBLE SULFONATES—manufactured by sulfonation of synthetically produced hydrocarbon under closely controlled conditions.

CONOCO H-300, a secondary plasticizer for vinyls—outstanding light stability . . . improved low-temperature flexibility . . . viscosity depressant and stabilizer.

TECHNICAL ASSISTANCE—Continental Oil Company is thoroughly experienced in the manufacture and application of sulfonates. Let us help you with your particular problem. Continental Oil Company, Petrochemical Department, DivisionD-12 630 Fifth Avenue, New York 20, N. Y.—1353 No. North Branch Street, Chicago, Ill.—Export: Airco Company International, 60 East 42nd Street, New York 17, N. Y.

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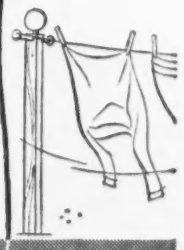

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CONTINENTAL OIL COMPANY

Nitromethane—Oil, Peach Kernel

Nitromethane dms., c.l. dlvd E lb 24 —
l.c.l. dlvd E lb 24¾- —
tanks dlvd E lb 22½- —
Nitromethane prices West of Rockies are 1c. higher
a-Nitronaphthalene, bbls. frt. alld. lb .41 - —
Nitropropane-1 and -2, dms., c.l., dlvd E lb .22½- —
l.c.l. dlvd E lb 23¼- —
tanks dlvd E lb. 21 - —
Nitropropane prices West of Rockies are 1c higher.
o-Nitrophenol, dms. works, frt. equald lb 94 - —
p-Nitrophenol, dms. frt. alld. c.l. lb. .51 - —
l.c.l., lb 53 - —
o-Nitrotoluene dms. c.l. frt. alld lb 10 - —
l.c.l. frt alld lb 11 - —
tanks frt alld lb 09 - —
m-Nitro-p-toluidine, dms lb 1.59 - —
Nitrous ether cone. bots 100-lb. lots lb 1.28 1.35
Nonyl phenol dms. c.l. frt alld. lb. .26½- —
l.c.l. frt. alld lb .27½- —
tanks, frt. alld lb .24½- —
Nutgalls, Aleppo bgs lb .36 .38
Chinese bgs lb No prices
Nutmeg, East Indian, bgs lb. 2.80 - —
West Indian, bgs lb. 2.80 - —
Nux vomica bls lb 10 .12
powd. bbls. bxs lb 15 .17

O

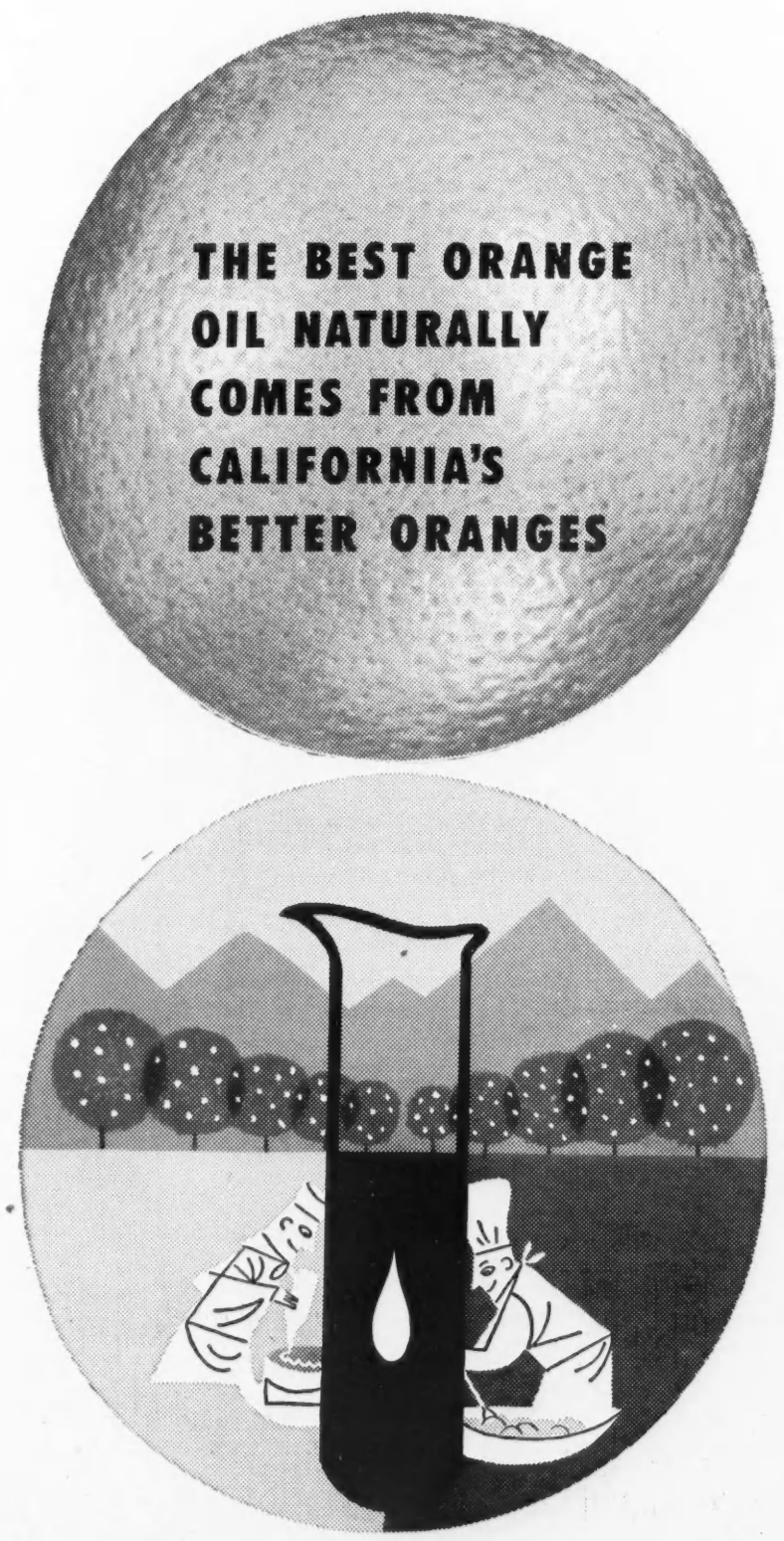
Octane, indust., tanks Bayonne, N J gal. .19 - —
Baytown Tex gal. .15¾- —
Borger, Tex gal. .15¾- —
1-Octanol, tech. dms., c.l., dlvd. lb. .35 - —
l.c.l. dlvd lb. .37 - —
tanks, dlvd lb. .32½- —
Octyl phenol, bgs., c.l., works lb. .24 - —
l.c.l. works lb. .24½- —
tanks, works lb. .23 - —
Drum prices for octyl phenol are 11c higher

(Essential oils prices listed below are f.o.b. New York, with differences between high and low quotations due to differences in quantity quality or in individual suppliers, views.)

Oil, abies, siberica, cns lb. 4.00 - —
Almond, artif. bitter (see Benzaldehyde)
nat. bitter, F.P.A. bots lb 3.00 3.75
NF, bots. lb 3.25 3.75
sweet, USP, cns, dms lb. 1.25 —
Allspice (see Oil, pimento).
Amyris, dms lb 1.25 —
Angelica root, bots lb.66.00 -100.00
seed bots lb 56.00 95.00
Aniline (see A).
Anise, USP, dms lb 3.50 4.00
Apricot kernel, USP, dms lb. .48 .65
Avocado, cns lb 3.25 —
Oil, bay, NF, Puerto Rican, 50-55%, cns lb. 2.15 - 3.00
55-60%, cns lb. 2.50 - 3.00
West Indian, 50-55% cns., dms., lb 1.85 2.40
Bergamot, nat., NF Italian, cns lb.10.00 - —
Birchtar, crude, cns lb 1.50 - 1.90
rectified, NF, cns lb. 1.75 - —
Bois de rose, Brazil, dms lb. 3.50 - —
Mexican (see Oil, lignaloe wood).
Bone, dms., works lb. .65 - .70
Cajeput, native, cns. lb. 1.75 - 3.30
redist., USP, cns lb. 2.25 3.40
Calamus, bots lb.12.00 -20.00
Camphor, sassafrassy, dms. lb. .30 - .45
white, dms lb. 29 - —
Cananga, native, cns lb. 8.50 - 8.75
rectified, cns lb.10.00 -13.00
Caraway, NF, cns lb. 3.65 - 4.00
Capsicum (see Capsicum oleoreson.
Cardamom, NF, bots lb.38.00 -40.50
Cassia, USP (see Oil, cinnamon, USP).
Castor, dom., blown, dms., c.l. lb. .2800- —
l.c.l. lb. .2900- —
dehydrated, bodied, dms., c.l. lb. .2960- —
l.c.l. lb. .3060- —
tanks lb. .2760- —
unbodied, dms., c.l. lb. .2810- —
l.c.l. lb. .2910- —
tanks lb. .2610- —
hydrogenated, bgs., ton lots lb. .3325- —
l.c.l., dlvd lb. .3525- —
No. 1, dms, c.l. lb. .2450- —
l.c.l. lb. .2550- —
tanks lb. .2250- —
No. 3, tech., dms., c.l. lb. .2275- —
l.c.l. lb. .2400- —
tanks lb. .2100- —
USP, dms., c.l. lb. .2600- —
l.c.l. lb. .2700- —
tanks lb. .2400- —
Oil, castor, USP, refined, deod., dms., imp. No. 1, Brazilian, tanks lb. .2200 - —
c.l. lb. .29 - —
l.c.l. lb. .30 - —
Sulfonated, 50%, dms., works lb. .15¼- .15½
75%, dms., works lb. .20 - .20½
Cedarleaf, USP, XIII, cns., dms lb 3.65 - —
Cedarwood, cns., dms lb. .65 - 1.00
Celery seed, bots. lb.14.00 - —
Chamomile, blue, Hungarian, bots. lb.190.00 -195.00
Chenopodium, NF, cns lb. 4.50 - 4.75
Chinawood (see Oil, tung).
Cinnamon, bark, bots lb.36.00 -70.00
leaf, crude, dms lb. 1 60 - 2.00
USP, cns., dms (Cassia) lb 10.25 -10.90
Citronella, Ceylon, cns., dms lb. .90 - —
Java, cns lb 1.95 - —
Java-type, cns lb. 1.50 - —
Clove, bud, USP, cns., dms lb. 2.85 - 2.90
leaf, crude, dms lb 1.20 1.50
Coconut, crude, tanks, N. Y. lb. .13 - —
Pac. coast lb. .11⅝- —
refd. Cochin type dms. tax incl., lb. .19¼- .19½
deodorized, tax incl., dms lb. .22¼- .23¼
Cod, Newfoundland, dms lb. .11⅝- .11⅞
Codliver, USP, dms gal. 1.45 - 1.55
Copaiba, cns. lb. 1.75 2.50
Coriander, USP bots lb.11.75 —
Corn, crude, tanks, works lb. .14⅝- —
foots (soapstock), acid 95%, tanks, N. Y. lb. .06 - —
refd., salad, dms lb. .2021- .2150
tanks lb. .1821- —
Costus, bots. oz. 8.00 - —
Cottonseed, crude, tanks, South East lb. .14 Nom.
Valley lb. .14 - —
Texas, Lubbock lb. .13⅞- —
Waco lb. .14¼- —
foots (soapstock), acid 95%, tanks, N. Y. lb. .05 - —
refd., salad, dms lb. .19⅜- .19⅞
tanks lb. .17⅜- —
Creosote (see Creosote, coaltar).
Cubeb, cns lb. 4.10 - 4.25
Cumin, bots., cns. lb. 4.75 5.00
Cypress, bots lb 5.30 —
Degras (see D).
Dillseed, bots lb 2.80 4.25
Dillweed, dom., bots., dms lb. 3.25 4.25
Dip (see D)
Erigeron, cns lb. 5.50 - 7.50
Eucalyptus, NF, rect., 70-80% dms. lb. .62 - —
80-90%, dms lb 72 - —
Fennel, sweet, USP, cns lb. 2.85 - —
Fir, Canada, cns lb. 4.75 - —
Fish, refd., alkali, dms lb. .1450- .1500
kettle-bodied, dms lb. .1680- .1730
light-pressed, dms lb. .1300- .1350
tanks lb. .1150- —
Fishliver, crude for feeds or concentrating 4,000 to 12,000 A units per gram dms., 1,000,000 units. .08 .09
10,000 to 20,000 A units per gram, dms., 1,000,000 units. .09 .10
25,000 to 35,000 A units per gram, dms. 1,000,000 units. .09 .10
40,000 to 55,000 A units per gram dms. 1,000,000 units. .10½- .11
100,000 A units per gram., dms 1,000,000 units. .14 —
200,000 A units per gram., dms 1,000,000 units. .15½- —
500,000 A units per gram., dms 1,000,000 units. .16 - —

Prices above are based on the USP XIV method of conversion, Morton Stubbs Corrected E x 1900

Fusel (see F)
Garlic, pure, bots oz. 4.75 - —
Gaultheria (see Oil, wintergreen)
Geranium, Algerian, cns lb.13.50 -14.50
Bourbon, cns lb.14.25 - —
Turkish (see Oil palmarosa)
Ginger, dist., bots lb.20.00 -23.00
Grapefruit, dms lb. 1.65 - —
Grease No 1, dms., c.l. lb .15¼ - —
l.c.l. lb. .16¼- .18¼
extra, winter, strained dms, c.l. lb. .17¼- —
prime, burning, dms, c.l. lb. .18¾- —
l.c.l. lb. .19¾- 21¼
Guaiacwood, cns. lb. 1.60 - —
Hemlock, cns lb. 2.10 - 2.50
Juniper berry, NF, VIII, bots. lb 2.75 - 4.00
twice rectified, bots lb 3.60 7.00
Tar, NF (see Juniper tar).
Wood, tech., cns. lb .38 .55
Lard (see Oil, grease).
Laurel leaf, dms., cns lb 9.75 -12.50
Lavandin, dms., cns lb. 2.55 - 2.95
Lavender, flower, USP, French, 35-37% ester, cns lb 2.85 4.60
38-40% ester, cns lb. 9.25 -10.00
40-42% ester, cns lb.10.00 -14.00
spike, Spanish, cns lb. 2.60 - —
Lemon, USP, Calif., cns., dms lb 4.25 - 5.00
Messina, cns lb 5.75 - —
terpeneless, bots lb.50.00 -85.00
Lemongrass, cns., dms lb. 1.65 - —
Lime, dist., Mexican, cns lb. 4.75 - —
West Indian, cns lb. 4.75 - —
expressed West Indian, cns lb 6.00 8.00
terpeneless, bots lb.50.00 -85.00
Lignaloe wood, Mex., cns lb. 4.65 - 5.00
Linseed, raw, dms., c.l., N. Y. lb. .1700- —
l.c.l. lb. .1800- .1830
tanks, f.o.b. Minneapolis lb. .1370- —
New York lb. .1500- —
tankwagon, New York lb. .1530- .1540
Boiled linseed oil 006c per lb higher
Mace, dist., cns., dms lb.11.00 - —
Mandarin (see Oil, tangerine).
Menhaden, crude, tanks, works, Atlantic & Gulf lb. .09¾- .10
Mineral, white (see Oil, white mineral).
Mirbane (see Nitrobenzene)
Mustard seed, nat., dms. lb. .17½ Nom.
syn., bots lb. 1.60 1.85
Neatsfoot, 15° cold test, dms lb. .30 - .33
20° cold test, dms lb. .29 - .32
30° cold test, dms lb .28 - .31
Neroli, NF, French bots lb.575.00 - —
Nutmeg, USP, dist., East Indian, cns., dms lb.12.50 -16.00
West Indian, cns., dms lb.12.50 -16.00
Ocotea cymbarum, dms lb .50 .60
Oiticica, liq., dms. lb. .17 - .17½
tanks lb. .15½- —
Oleo, extra, dms. lb. .20 Nom.
Olibanum, bots lb. 5.50 7.65
extra fine, bots lb. 8.00 9.00
Olive, edible, Spanish, dms., duty-paid gal. 3.50 - 3.60
Orange, expressed, USP, Brazilian, cns., dms lb. No stocks.
Calif., cns., dms lb. .60 - 1.75
Florida, cns., dms lb. .50 - .60
Messina, cns lb. 3.85 - 5.85
West Indian, cns., dms. lb. 2.50 - 3.65
sesquiterpeneless, bots. lb.65.00 -120.00
Origanum, Spanish, cns lb. 2.00 — —
Palm, clarif., dms lb. .15¾- .16¾
Palmarosa, cns lb. 8.25 - 9.00
Paraffin, pale, 100-110 vis., at 100°F tanks, East Coast refy gal 14 - —
Patchouli, dms lb. 6.00 - —
Peach kernel, USP (see Oil apricot kernel).



Flavor is the most important factor in your finished product. Better *orange* flavor naturally comes from *better oranges*, and all tests prove California oranges are richer in flavor strength, more intense in aromatic constituents.

Wherever you use Oil of Orange, be sure your supplier provides Exchange Brand California Oil of Orange. No other oil of orange has the world-wide reputation of Exchange Brand, produced by the people who know citrus best—the Sunkist Growers of California.

Flavor is one of your least expensive ingredients. Doesn't it seem foolish to settle for cheaper, inferior orange oil when flavor is so important yet costs so little? Ask your supplier for Exchange Brand Oil of Orange, with its consistent year-after-year quality and its richer orange flavor.

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Sunkist Growers

Products Department • Ontario, California

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Ungerer & Company, Inc. 161 Avenue of the Americas New York 13, N.Y.

Inquiries from countries other than the U.S. and Canada should be directed to the Products Department, Sunkist Growers.

OIL OF ORANGE, U.S.P.

Peanut, crude, tanks, f.o.b mills, lb. .19 - —
refd., dms. lb. .24½- .25
tanks lb. .22½- —
Pennyroyal USP imported, ens lb 2.75 3.50
Peppermint, nat., dms lb. 4.75 - 6.50
redist., USP, dms lb. 5.25 - 6.75
Persic, USP (see Oil apricot kernel)
Petitgrain South American, ens. dms. 3.00 - —
Pimento berry NF, dms lb 4.50 5.00
leaf, ens. lb. 2.05 2.60
Pine, dest.-dist., dms., l.c.l. works, lb. .12¼- —
ex whse lb. 14¼ —
steam-dist., dms., ex whse, N.Y.C lb. .176 —
dlvd. lb. .179 —
Pineneedle Siberian (see Oil abies siberica)
Oil, rapeseed, tankcars lb. .18½- —
Red (see Acid oleic)
Rice bran clarif. dms., t.c.l lb. .18 Nom
tanks, dlvd. E lb .15 - .15½
Rose nat. Bulgarian bots oz 43.00 57.00
Rosemary, Spanish, USP, ens., dms lb 60 1.00
ex-ft. ens. dms lb 50 70
Rue bots lb 2.00 2.50
Safflower, dms., N. Y. lb. .1785- .1835
tanks, same basis lb .15 —
Sage, clary bots lb 18.75 19.00
Dalmatian, ens lb. 4.30 - —
Spanish, ens lb 1.00 1.45
Sandalwood, NF, ens lb.14.00 - —
Sardine crude tanks Pac coast, lb. .08½- .08¾
Sassafras artif., dms lb .48 .60
nat. dom USP dms lb 1.45 2.10
imp. Brazilian (see Oil ocotea cymbarum)
Savin ens lb 2.75 —
Savory, ens lb 4.25 —
Sesame, USP, dms lb. .38 - .39
Shingle stain, tar distillate, dms., c.l. works gal .35 —
c.l. works gal .44 —
tanks, works gal .23 —
Snakeroot, Canada, ens lb.27.50 31.00
Soybean, crude, tanks, Decatur, lb. .14⅜- —
foots soapstock acid 95% tanks, N. Y. lb. .06⅜- —
refd., alkali, dms lb. .1882- .1907
tanks lb. .1682- —
clarified, dms lb. .1832- .1857
tanks lb. .1632- —
salad, dms lb. .1912- .1937
tanks lb. .17⅛- —
Spearmint, USP, dms lb. 4.40 - —
Sperm, bleached winter 45° dms, lb. .1675- .1725
tanks lb. .1500- —
nat. winter, 45° dms lb. .1575- .1625
tanks lb. .1400- —
Spruce, ens., dms lb. 2.10 2.75
Sweet birch USP Northern ens. lb 4.25 9.50
Southern, ens lb. 2.30 2.75
Tall, crude, dms., c.l., works lb. .03¾- .04¼
tanks, works lb. .02½- —
dist., dms., c.l., works lb. .07½- —
l.c.l. works lb. .07¾- —
tanks, works lb. .06 - .06¼
refd., dms., c.l., works lb. .06½- .06¾
lb. .06½- .06¾
t.c.l. works lb. .06¾- .07¾
tanks works lb. .05¼- .05¾
Tallow, acidless, dms., c.l. lb. .13½- —
l.c.l. lb. .14½ .16
Tangerine Floridian, dms lb. 2.00 2.60
Tansy, dms lb. 7.50 8.40
Tar acid (see T's)
Pine, comm., dms., c.l., works lb. .0561- —
l.c.l. works lb. .0634- —
whse lb. .0745- —
tanks works lb. .046 —
rectified, NF, dms., mcl., l.c.l., works, South gal 1.05 - —
ex whse, N.Y.C. gal. 1.15 - —
refd., dms., incl., l.c.l., works, gal. .92 - —
ex-whse, N.Y.C. gal. 1.02 - —
Theobroma (see Cocoa butter)
Thyme, NF, red., ens., dms lb. 1.45 - 1.75
white, ens lb. 1.70 - 2.00
tech. white, ens lb 40 1.85
Tung, dms., c.l., N. Y. lb. .25 - —
l.c.l., same basis lb. .25½- .26
tanks, N. Y. lb. .23½- —
domestic mills lb. .23 - .23¼
Turkey red (see Oil, castor, sulfonated)
Turpentine, NF, ens., dms. lb 28 45
Veviter, Bourbon, ens lb.11.75 -11.90
Haitian, ens. lb. 9.25 -10.00
Java, ens lb.18.50 -20.00
Wheat, germ, 5-gal. dms gal.11.20 - —
White mineral, tech., 50-65 vis., non-ret. dms., c.l., t.o.b. N.Y. gal. .53 - —
65-75 vis. non-ret. dms. c.l., same basis gal. .56 - —
t.c.l., same basis gal. .61 - —
80-90 vis., non-ret., dms., c.l., same basis gal. .57 - —
t.c.l., same basis gal. .62 - —
135-138 vis., non-ret. dms., c.l., same basis gal. .63 - —
t.c.l., same basis gal. .68 - —
145-155 vis. non-ret. dms., c.l., same basis gal. .69½- —
t.c.l., same basis gal. .74½- —
USP, 180-190 vis., non-ret. dms., c.l. same basis gal. .71 - —
t.c.l., same basis gal. .76 - —
200-210 vs., non-ret. dms., c.l., same basis gal. .75 - —
t.c.l., same basis gal. .79 - —
345-355 vis., non-ret. dms., c.l., same basis gal. .78½- —
t.c.l., same basis gal. .84½- —
Wintergreen, USP, nat., Northern, ens. lb. 6.35 -10.30
Southern ens lb 3.20 19.50
syn (see Methyl salicylate)
Wood (see Oil tung)
Wormseed (see Oil, Chenopodium NF).
Wormwood, ens lb. 5.50 6.85
Ylang-ylang, Bourbon, bots lb.14.00 -16.00
extra, bots lb 28.00 40.00
Madagascar, bots lb No stocks
Oleostearine, dms. lb. .14 - .15
Opium, USP, ens oz 19.20 19.45
gran., USP, ens oz 21.65 21.90
powd., USP, ens oz 21.65 21.90
Orange cadmium-selenide lithopone, light shade, bbls., frt. alld E. of Rockies lb. 1.80 - —
deep shade, bbls lb. 2.00 - —
Cadmium-mercury lithopone, deep shade, bbls lb. 1.78 - —
Chrome, CP, bbls., dlvd. N. of Tennessee and N.C., E. of Miss. R., include Davenport, Tenn., and E. of Minneapolis, Rock Island, St. Louis, St. Paul lb. .33½- .35

Chrome orange prices are ½c. higher dlvd Ala., Fla., Ga., La. (Shreveport); 1½c. Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex.; 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City. Wichita prices are equalized with Chicago.

Dinitroaniline toner CP lb. 1.45 - —
Mineral, American, bbls., l.c.l., works lb. .2235- —
Molybdated, bbls. lb. .46 - .46½
o-Nitroaniline toner, kegs, ... lb. 1.15 - —

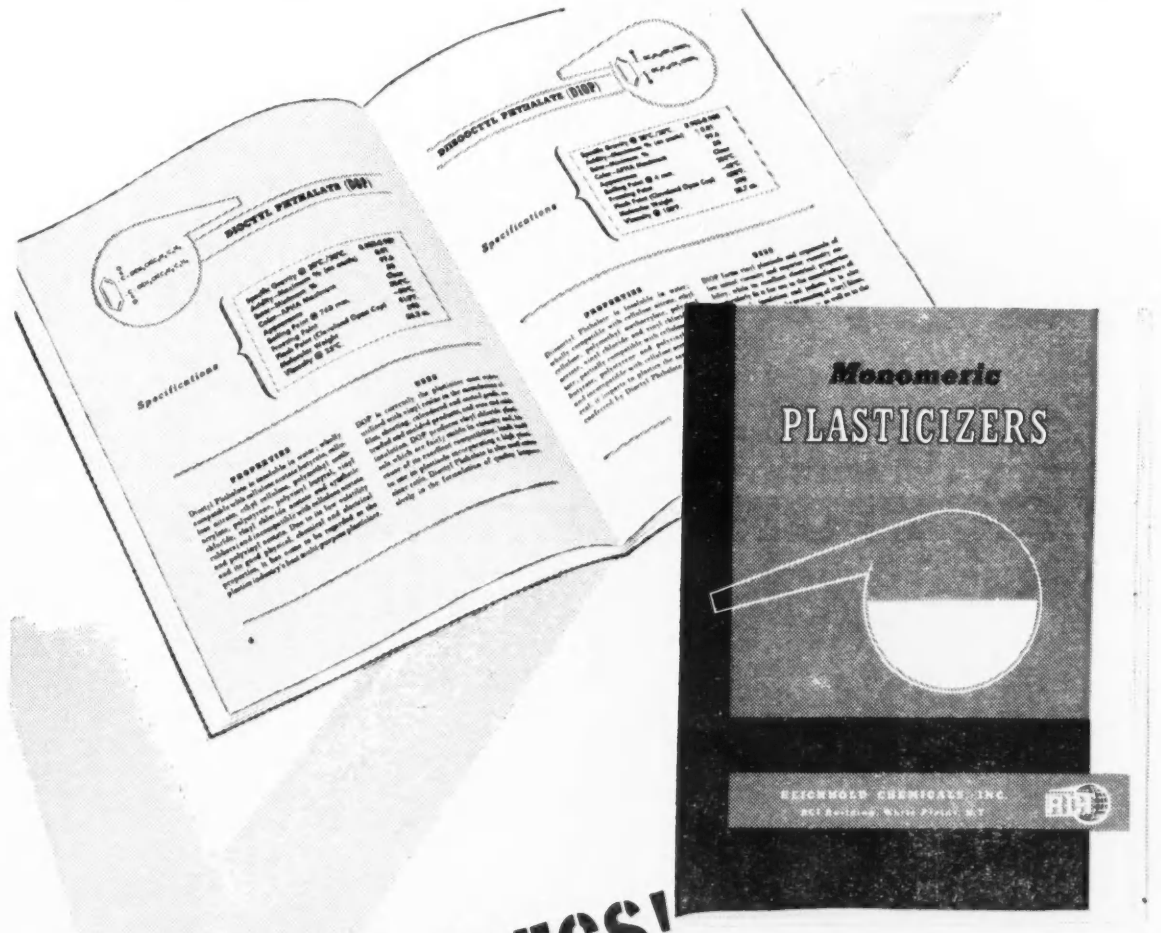
Orange peel, bitter, Haitian, bls lb. .14 - .16
sweet, bls lb. .16 .18
Orris root, Florentine, bls lb. .55 - —
powd., bbls., bx lb. .68 - —
Verona, bls. lb .35 .40
powd., bbls., bxs lb. .45 - —
Orthoaminobiphenyl (see o-Aminobiphenyl)
Orthoanisidin (see o-Anisidine)
Orthochloroanilin (see o-Chloroaniline)
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroparanitroanilin (see 2-Chloro-4-nitroaniline)
Orthochlorophenol (see o-Chlorophenol)
Orthocresol (see o-Cresol)
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroanilin (see o-Nitroaniline)
Orthonitrochlorobenzene (see o-Nitrochlorobenzene)
Orthonitrobiphenyl (see o-Nitrobiphenyl)
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol)
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidin (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol)
Ortho-tertiary-amylphenol (see o-tert-Amylphenol)
Orthotolidin (see o-Tolidine base).
Orthotoluidin (see o-Toluidine)
Osage orange, crvst., No. 1, bbls., l.c.l. lb. .40 —
extract, liq., No. 1, bbls., l.c.l., lb. .19 —
Ouabain USP, bots gram 3.00 4.00
Oxyquinolin sulfate, ens. 100-lb. lots, works lb 4.75 5.00
smaller lots works lb. 4.92 5.17

P

Papain, USP, African, bots lb. 3.50 4.00
Ceylon lb 3.00 3.50
Papaverine, nat. or syn. hydrochloride, USP, ens., 25-oz. to 100-oz. lots oz 5.00 —
smaller lots oz. 5.05 5.20
Sulfate, ens. oz 7.10 7.35
Paprika, Roumanian, bgs lb 26 —
Spanish, bgs lb. .60 - —
Yugoslavian, bgs lb. .35 - —
Para-aminophenol (see p-Aminophenol)
Para-anisidin (see p-Anisidine)
Parachloro-ortho-nitroanilin (see 4-Chloro-2-nitroaniline)
Parachloranilin (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde)
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol)
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Paraffin, crude, scale, white, 123°-127°F., ASTM, tanks, refy. lb. .0710- —
fully refd., 122°-124°F., ASTM, tanks, refy lb. .0815- —
125°-127°F., ASTM, tanks, refy lb. .0815- —
130°-132°F., ASTM, tanks, refy lb. .0815- —
132°-134°F., ASTM, tanks, refy lb. .0815- —
Paraffin, fully refd., 135°-137°F., ASTM, tanks, refy lb. .0815- —

AMP temperatures are an arbitrary 3°F higher than ASTM

Paraformaldehyde 91% flake, bgs., c.l. frt. alld lb. .11¼ —
l.c.l., frt. alld lb. .13¼- 14¼
powd., bgs., c.l., frt. alld lb. .16 —
l.c.l., frt. alld lb. .17½- —
USP, X, fib, dms., c.l. lb 183 —
1,000-lb. lots lb 193 —
smaller lots lb 208 —
Paraldehyde, tech., 98%, 55-gal. dms., c.l., works lb. .14 —
t.c.l., works lb 15 —
tanks, works lb. .11½ —
Paranitroanilin (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene)
Paranitrophenol (see p-Nitrophenol)
Paraphenetidin (see p-Phenetidine)
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol)
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, spray powder, 15% deal ers, bgs., dms., frt. alld lb .50 .53
tech., dms., c.l. t.l. works lb 1.3395 —
l.c.l., works lb 1.51 —
Paratoluenesulphonamide (see p-Toluenesulfonamide).
Paris green, dealer, dms., c.l., frt. alld lb. .44 .47
t.c.l., same basis lb .45 .48



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Because impurities responsible for inferior end products have been removed, these RCI materials feature a high degree of plasticizing efficiency. Your own laboratory and plant tests will demonstrate that RCI plasticizers are not only unusually stable, but also display a pronounced resistance to detergent extraction.

Write for the catalog on RCI Monomeric Plasticizers illustrated above. Attach the coupon at right to your letterhead. When you've read the catalog, send for a free sample of any plasticizer you want to test after studying the specifications. Included in this RCI line are:

Dibutyl Phthalate
Dioctyl Phthalate
Diisooctyl Phthalate
Dicapryl Phthalate
Octyl Decyl Phthalate
Didecyl Phthalate
Butyl Decyl Phthalate
Dioctyl Adipate
Didecyl Adipate
Dibutoxyethyl Adipate
Dibutyl Sebacate
Dioctyl Sebacate
Diisooctyl Sebacate
Dibutyl Fumarate

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company indicated on this letterhead. I would like the catalog on monomeric plasticizers to be sent to me by:

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Synthetic Resins • Chemical Colors • Industrial Adhesives
Plasticizers • Phenol • Formaldehyde • Glycerine • Phthalic Anhydride
Maleic Anhydride • Sebacic Acid • Sodium Sulfite • Pentaerythritol
Pentachlorophenol • Sulfuric Acid

REICHHOLD CHEMICALS, INC., RCI BUILDING, WHITE PLAINS, N. Y.

Creative Chemistry . . .
. . . Your Partner in Progress

Passion flower herb, bls. lb. .25 - —
Peanut meal, 45%, old process, bgs., mills ton.55.00 Nom.
Pectin, citrus, NF, powd., bbls lb 2.05 2.06
tech., powd., bbls. lb 1.25 —
imported, Danish, ex whse cn 1.28 —
Penicillin, crystalline potassium, bulk 1,000,000 units. .0525- .0550
Procaine, bulk 1,000,000 units. .0525- .0550
Sodium, bulk 1,000,000 units. .0625- .0650
Pentachlorophenol, dms., c.l., t.l., works, frt. equald lb. .22 —
t.c.l., same basis lb. .23½- .30
Pentaerythritol, tech., bgs., c.l., works lb. .32 - —
t.c.l., works lb .33 - —
Di and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy. gal. .13 - —
Pepper, black, Malabar, spot bgs. lb. .28½- —
red, Gondar, spot bgs. lb. No prices.
Japanese, hontaka bgs lb. .34 - —
cirreseyes bgs. new crop lb No prices.
Pepper, red, Mombasa, bgs., shipt. lb. .56 - .57
Nigerian, bgs lb. .42 - —
Turkish, bgs. lb. .28 - —
white, bgs lb. .35 - .36
Peppermint leaves, USP dom., bls., dms lb 70 - .75
imp., bls lb. .85 - —
Perchloroethylene, dms., c.l., or truckloads, dlvd lb. .13 - —
t.c.l., dlvd. lb. .14½- —
tanktruck, 1,000 gal., min. dlvd lb. .12 - —
tanks dlvd. lb. .11½- —
Peru balsam, dms. lb. 1.35 - —

Petrolatum, extra amber, dms., c.l., refy. lb. .06½- —
t.c.l., dlvd lb. .08¼- —
tanks, refy. lb. .04¼- —
cream, dms., c.l., refy lb. .07½- —
t.c.l., dlvd. lb. .09¾- —
tanks, refy. lb. .05¼- —
USP, white, lily, dms., c.l., refy. lb. .07⅞- —
t.c.l., dlvd lb. .10⅛- —
tanks, refy. lb. .05⅝- —
snow, dms., c.l., refy lb. .08⅜- —
t.c.l., dlvd lb. .10⅝- —
tanks, refy lb. .06⅛- —
yellow, soft, dms., c.l., refy lb. .06½- —
t.c.l., dlvd lb. .08¼- —
tanks, refy lb. .04¼- —
Petroleum, lacquer diluent, 150°-240°F. b.r., tanks, West Coast, ex tax, Los Angeles. gal. .169 .204
East coast, N. J., N. Y. gal. .19 —
Group 3, benzol-type gal. .14125- .14625
toluol-type gal. .13125- .13375
Mineral spirits, reg. tanks, Calif., ex tax San Francisco gal. .164 - —
East coast, N.J. N Y gal. .17 - —
Group 3 gal. .11875- —
tankwagon, Boston gal. .19 - —
Buffalo gal. .195 - —
Chicago gal. .279 - —
Cleveland gal. .22 - —
Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
Pittsburgh gal. .18 - —
Providence gal. .195 - —

Petroleum, mineral spirits, odorless, tanks, refy., Watson, Cal. gal. .245 - —
Borger, Tex. gal. .24 - —
Houston, Tex. gal. .24 - —
Wood River, Ill. gal. .2625- —
N. J., dlvd gal. .32 - —
N. Y., dlvd gal. .33½- —
tankwagon, N. J., dlvd gal. .36 - —
N. Y., dlvd. gal. .37 - —
Naphtha, cleaners, tanks, East Coast, N. J., and N. Y. gal. .17 - —
Group 3 gal. .12875- —
tankwagon, Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
High solvency (see Petroleum solvent, partial aromatic).
VM&P, 225°-300°F., b.r., tanks, West Coast, Los Angeles gal. .169 - —
Portland, Ore gal. .175 - —
San Francisco gal. .174 - —
Seattle, Wash gal. .175 - —
East Coast, N. J. and N. Y. gal. .18 - —
Group 3 gal. .12875- —
tankwagon, Boston gal. .205 - —
Chicago gal. .289 - —
Cleveland gal. .23 - —
Newark gal. .195 - —
New York gal. .195 - —
Philadelphia gal. .20 - —
Pittsburgh gal. .19 - —
Solvent, partial aromatic, tanks, 205°-282°F., b.r., 41°C., m.a.p., N. Y., N. J gal. .245 - —
212°-278°F b.r. 43°C m.a.p., N. J gal. .26 - —
212°-284°F b.r. 19°C. m.a.p., N. J gal. .29 - —
224°-280°F., b.r., 48°C, m.p.a., Houston gal. .215 - —

Petroleum solvent, partial aromatic, tanks, 273°-361°F., b.r., 29°C., m.a.p., N. J. gal. .29 - —
282°-325°F. b.r., 41.5°C. m.a.p. Houston gal. .25 - —
287°-386°F., b.r., 31°C., m.a.p., N. J. gal. .29 - —
310°-314°F., b.r., 13.5°C., m.a.p., Texas City gal. .33 - —
310°-348° b.r., 17°C., m.a.p., N. Y., N. J gal. .35 - —
320°-360°F., b.r., 16°C., m.a.p., N. Y., N. J gal. .33 - —
324°-349°F., 37°C., m.a.p., Houston gal. .33 - —
341°-390°F., b.r., 35°C., m.a.p., N. J gal. .27 - —
352°-413°F., b.r., 30°C., m.a.p. Houston gal. .33 - —
358°-401°F., b.r., 25°C., m.a.p., N. Y., N. J. gal. .39 - —
364°-404°F b.r., 19°C. m.a.p., N. Y., N. J gal. .425 - —
367°-418°F. b.r., 19.6°C. m.a.p., N. Y., N. J gal. .33 - —
Rubber, tanks, Cal., ex tax, San Francisco gal. .173 - —
East Coast, N. J., N. Y., gal. .18 - —
Group 3 gal. .12875- —
Stoddard, tanks, East Coast, N. J., N. Y. gal. .17 - —
Group 3 gal. .12375- —
Pennsylvania western gal. .15 - —
tankwagon, Boston gal. .19 - —
Chicago gal. .289 - —
Cleveland gal. .22 - —
Los Angeles, ex tax gal. .194 - —
Newark gal. .18 - —
New York gal. .18 - —
Philadelphia gal. .185 - —
Pittsburgh gal. .18 - —
Sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works lb. .16½- .18¾
t.c.l. works lb. .17½- .19
tanks, works lb. .14½- .17
50-55% sulfonic content, non-ret. dms., c.l., works lb. .16 - —
t.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms., t.l., frt. alld. E lb. .91 - —
t.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.00 - —
t.c.l., same basis lb. 1.03 - —
Phenobarbitol, USP, dms., 100-lb. lots lb. 3.25 - —
Phenobarbital-sodium, USP, dms., 100-lb. lots lb. 3.25 - —
Phenol, 90-92% (cresol 8-10%), non-ret. dms. c.l. frt alld E. of Rockies lb. .17¾- .18
t.c.l. same basis lb. .18¼- .19
tanks, same basis lb. .16 - —
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .17½- —
t.c.l., same basis lb. .18½- —
tanks, same basis lb. .15½- —
39°C or above, tar distilled, non-ret dms. c.l. same basis. lb. .19¼- .19½
t.c.l same basis lb. .19¾- .20½
tanks, same basis lb. .17½- —
USP, syn., dms. c.l., t.l., frt. alld lb. .20 - —
t.c.l., same basis lb. .22 - —
tanks, same basis lb. .18 - —
Phenolphthalein, USP or yellow, bbls. dms. 2,000-lb lots. lb. 1.15 - —
smaller lots lb. 1.17 - 1.22
Phenothiazine, NF, fib. dms., c.l., frt. adjusted lb. .39 - —
over 2,100 lbs., same basis lb. .41 - —
less than 2,100 lbs. same basis. lb. .43 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Salicylate (see Salol.)
Phenylacetaldehyde, soln., 50%, bots lb. 2.40 2.70
100%, bots lb. 4.00 4.65
1-Phenyl-3-carnethoxy pyrazolone-5, 250-lb. fib. drms., dlvd. E lb. 3.60 - —
smaller drms., dlvd. E lb. 4.00 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E lb. .40½- —
t.c.l., dlvd. E lb. .41½- —
tanks, dlvd. E lb. .38½- —
m-Phenylenediamine, dms. frt. alld. lb. .95 - —
o-Phenylenediamine, comi., 100 to 1,000 lbs., fib. dms., works lb. 1.70 - 1.80
p-Phenylenediamine, refd., tech., dms., works lb. 1.42 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
t.c.l. same basis lb .76 - —
dl-Phenylalanine dms. works lb. 27.00 - 37.50
Phenylethyl acetate, bots lb. 1.25 - 1.60
Phenylhydrazine base, CP bots lb. 3.00 - 3.07
Hydrochloride comi. kgs. works. lb 1.75 - —
purif. bots., works lb. 5.17 - —
1-Phenyl-3-methyl pyrazolone-5 250-lb lots, dlvd. E lb 1.80 - —
smaller lots, dlvd. E lb. 2.10 - —
Phenylethylphenyl acetate, bots lb. 4.15 - 4.35
o-Phenylphenol, dms. t.c.l. works. lb. .42 - .44
p-Phenylphenol, bgs., c.l., works lb. .37 - —
t.c.l., works lb. .41½- —
Phloroglucinol, comi., fib. dms., works lb. 6.40 - —
C.P., bots., works lb. 17.75 - —
tech., fib drums., works lb. 10.45 - —
Phosphate, defluorinated (see under Rock, Curacao, Atlantic ports, New Orleans ton. 48.00 - —
Florida, land pebble, run-of-mine, washed, dried unground, bulk, c.l., mines, 68-66%, b.p.l., bulk, c.l., mines long-ton. 4.94 - 4.99
70-68%, b.p.l., c.l., same basis long-ton. 5.34 - 5.39
72-70%, b.p.l., c.l., same basis long-ton. 5.99 - —
75-74%, b.p.l., c.l., same basis long-ton. 6.99 - —
78-76%, b.p.l., c.l., same basis long-ton. 7.99 - —
The Florida prices (above) are based on fuel oil at $2.47 per bbl. and labor at $1.43. Recent oil advance currently absorbed.
Phosphorus, amorph., red dms., t.l., works lb. .48 - —
smaller lots, works lb. .49 - .50
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20¼
t.c.l., works, frt equald. lb. .21½- —
tanks works, frt equald. lb. .19 - —
Oxychloride, dms., c.l., works lb. .14 - —
t.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Pentasulfide, solid, dms., c.l., works lb. .11½- —
t.c.l., works lb. .12½- —
Pentoxide, dms., c.l., works lb. .13½- —
t.c.l. works lb. .16½- —
Sesquisulfide, tins, cs., c.l., works. lb. .38 - —
t.c.l., works lb. .39 - .40
Trichloride, dms., c.l., works lb. .14 - —
t.c.l. works lb. .15 - —
tankcars, works lb. .12½- —

The ACTION of DETERGENTS

The ATTRACTION of vinyl TOYS

are outstanding when you use Enjay Oxo Alcohols

The modern miracles of detergents with their super-cleaning action and vinyl toys with their colorful attractiveness may seem wholly unrelated. But Enjay plays an important part in creating *both* of these products: many detergents are made with Enjay Tridecyl Alcohol and many of the new vinyl products are made from plasticizers formulated with Enjay Isooctyl and Decyl Alcohols.

Manufacturers who call on Enjay—the world's largest source of Oxo Alcohols—for their alcohols know that they can count on consistent quality, dependable supply.

If *you* have new-product problems related to the application of any Enjay petrochemical, our veteran research staff and the complete facilities of the new Enjay Laboratories are at your service. Just write or call!

Enjay offers a diversified line of petrochemicals for industry:

HIGHER OXO ALCOHOLS (Isooctyl Alcohol, Decyl Alcohol, Tridecyl Alcohol); LOWER ALCOHOLS (Isopropyl Alcohol, Ethyl Alcohol, Secondary Butyl Alcohol); and a varied line of OLEFINS AND DIOLEFINS, AROMATICS, KETONES AND SOLVENTS.

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U.S.I. CHEMICAL NEWS

Nov.-Dec. ★ A Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1956

Diester Lubricants Best So Far for Jet Aircraft

U.S.I. ISOSEBACIC® Acid Derivative Now Being Evaluated

A new diester formed by the reaction of U.S.I. ISOSEBACIC acid and 2-ethylhexyl alcohol is now being tested and shows promise as a lubricant for the fast moving parts of jet gas turbines. These lubricants must meet the stringent performance requirements of Military Specification MIL-L-7808 for satisfactory operation from 450°F down to −65°F — met most satisfactorily to date by diesters. The di-2-ethylhexyl ester of sebacic acid is most commonly used.

The chief advantage of the new diester is its derivation from unlimited petrochemical sources which can be counted upon to supply all needs at all times, even in emergency situations. U.S.I. ISOSEBACIC acid itself will be available in quantity when U.S.I.'s 10,000,000 lb. per year plant at Tuscola, Illinois comes onstream in mid-1957.

U.S.I. ISOSEBACIC acid is a mixture of isomers of sebacic acid in about these proportions:

2-ethyl suberic acid	72-80%
2.5-diethyl adipic acid	12.18%
sebacic acid	6-10%

In addition to the jet lubricant application, the material is being evaluated in vinyl resin plasticizers, polyurethane rubbers and foams, alkyd resins, nylon molding compounds and polyester resins. Samples can be obtained upon request.

Photographic Prints from Diazo Process Improved By Urethan Addition

The diazotype process for reproducing written and illustrative material on light-sensitive paper has been improved by incorporating carboxamides such as urethan (ethyl carbamate) into the light-sensitive diazo layer. Material can now be processed at high speed, yielding prints which are well developed, stable on storage and standing, bright in appearance and which show no tendency to curl.

Commercial diazo equipment is usually operated at or near its maximum speed of 30 feet per second in order to get the greatest throughput. At this speed, prints have in the past been frequently underdeveloped and subject to fading on storage or standing.

Now these conditions are being eliminated by incorporation of compounds such as urethan into the light-sensitive diazo layer. The preferred amount of urethan incorporated ranges from 250-350 grams per liter of diazo coating solution.

This development is but one of a growing number of applications for this versatile chemical. Urethan, first produced commercially by U.S.I., is also finding many new uses in medicine and as a starting material for chemical and pharmaceutical synthesis.

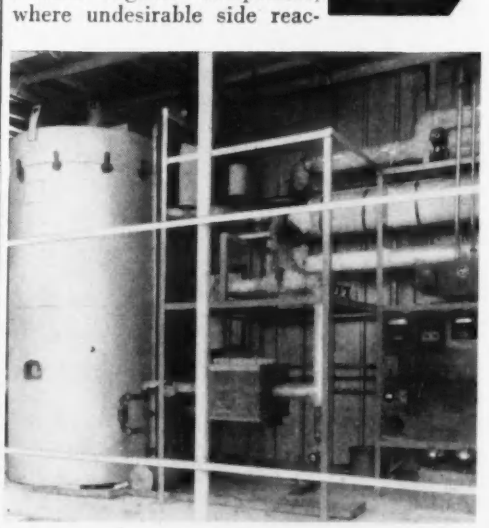
Dispersed Sodium Is Key to New Process for Rocket Fuels

Process Uses Sodium Two Ways — as Reactant and as Heat Transfer Agent

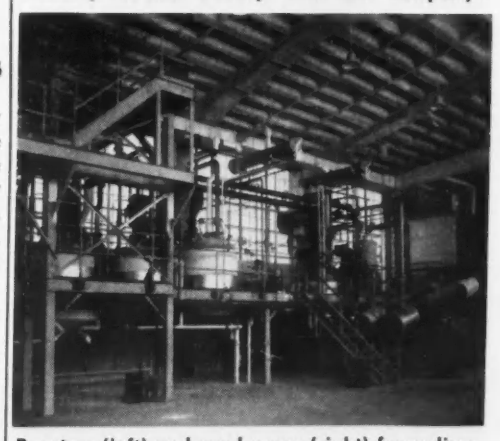
Sodium and potassium borohydrides are being produced by a new process which starts with metallic sodium dispersed in an inert liquid hydrocarbon. A semi-commercial plant now in operation is getting yields of about 95% on sodium borohydride (based on methyl borate), and up to about 90% on the potassium compound (based on contained KBH_4).

Borohydrides have been in the news lately as intermediates in the preparation of diborane, precursor of pentaborane rocket fuel. They are also achieving recognition among drug and fine chemical manufacturers as selective reducing agents for certain organic compounds, where undesirable side reac-

MORE



Heat supply system for sodium borohydride plant using the sodium-potassium alloy NaK as heat transfer fluid. Furnace, electromagnetic pump and heat exchangers are shown. Photo courtesy of the Callery Chemical Company.



Reactors (left) and condensers (right) for sodium hydride preparation. Photo courtesy of Metal Hydrides Incorporated.

Melting Points of Hafnium, Zirconium, Titanium Determined by New Technique

An improved technique for the accurate determination of melting points of metals in the temperature range 1500 to 2500°C has recently been announced which sets the value for zirconium at 1855 ± 15°C, for titanium at 1668 ± 10°C and for hafnium at 2222 ± 30°C. The improvements consist of gradient heating and refinements in cavity preparation to obtain true black-body conditions. Reproducibility of results is claimed to be ± 3°C.

Although M.P. values for zirconium and titanium have been obtained which are fairly constant from one investigator to another, the value for hafnium has varied widely. Temperatures of 1975 ± 25°C, 2430°C and 2230 ± 50°C have been reported. This new method was developed primarily to fix an accurate melting point value for hafnium, and has been applied to zirconium and titanium as a matter of interest.

The technique is a modification of the general tungsten suspension method, whereby a small specimen is suspended by a fine tungsten wire in a slender, induction-heated tungsten or tantalum cylinder, under vacuum. U.S.I. has special interest in this refinement since it is constructing two new plants to produce titanium and zirconium as well as a hafnium oxide by-product. The sodium reduction process used for these metals is also capable of producing hafnium.

Polyethylene Drums Okayed by ICC for Certain Shipments

Molded polyethylene drums have recently been approved by the Interstate Commerce Commission for commercial shipment of these regulated products: alcohols, acids or other corrosive liquids not specifically provided for, hydrochloric acid, hydrochloric acid mixtures, hydrochloric acid solutions, sodium chlorite solutions, hydrofluorosilicic acid, hydrofluoric acid, sulfuric acid, hypochlorite solutions, formic acid, formic acid solutions.

Those who wish to use polyethylene drums for the shipment of regulated products not listed above should apply to the Bureau of Explosives, 30 Vesey Street, New York, N. Y. for temporary permits. Nonregulated product shipments by road and rail were approved by the ICC early in 1955.

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Nov.-Dec. ★ **U.S.I. CHEMICAL NEWS** ★ 1956

CONTINUED

Sodium

tions must be avoided. A recent article also indicates possible use for sodium borohydride as a pulping agent in the paper industry.

Sodium Hydride Formed First

In the new process, molten sodium and a refined, high-boiling mineral oil are agitated with high shear and heated in a hydrogen atmosphere. This breaks the metal into tiny particles which react with the hydrogen gas to yield finely dispersed sodium hydride coated with oil. Methyl borate is then added to produce a mixture of sodium borohydride and sodium methoxide. The sodium borohydride is then solvent extracted and dried.

Where the potassium compound is desired, an aqueous potassium hydroxide solution is added to the mixture of sodium derivatives to precipitate potassium borohydride.

A circulating sodium-potassium (NaK) alloy system is used to heat the reaction mass. The liquid metal is heated in a furnace, dissipates its heat in a heat exchanger, and is circulated back through the furnace. Circulation is provided by an electromagnetic pump which has no stuffing boxes and is therefore not subject to the usual leakage and maintenance problems of ordinary pumps.

Dispersions Have Advantages

The sodium dispersion technique, originally developed to commercial feasibility by U.S.I. contributes several very important advantages in the new process:

- Rate of hydride formation is faster.
- The oil coating makes the hydride easier to handle.
- Reaction of the hydride with methyl borate is 10 times faster, proceeds efficiently, doesn't require excess hydride.
- Oil absorbs heats of solution and reaction, prevents decomposition which might result from overheating.

U.S.I. Technical Service Engineers, with experience gained in the company's sodium production facilities, have worked with two new borohydride producers in developing their plant and process designs.

Flexographic Printing Gets New "Voice"

Alcohol Use in Inks Reviewed

This September the first trade magazine devoted exclusively to flexographic printing made its debut. Called "Flexography", the magazine was created to meet the demands of this fast-growing industry for information on materials, techniques and equipment.

Flexography, a form of letterpress printing, uses rubber plates instead of metal and fluid inks which dry by solvent evaporation. An article on these inks and their formulation appears in the first issue of the new publication and should be of interest to all printing ink manufacturers.

U.S.I. Filmex® Used in Flexographic Printing

Proprietary ethyl alcohol, according to the article, is the most versatile and commonly used solvent for the colorants and vehicles which go into flexographic inks. U.S.I. makes an alcohol formulation known as FILMEX® which was specifically designed for this application. It is carefully formulated to eliminate all trace of hydrocarbons which might soften or otherwise deteriorate rubber plates and rolls. FILMEX® is one of the most reliable solvents on the market for the purpose.

ZIRCONIUM, TITANIUM WILL BE MADE HERE To house U.S.I.'s new 10 million pound-per-year titanium sponge plant as well as its 1.5 million pound-per-year zirconium sponge plant, the company has recently purchased this 175,000 square foot building at Ashtabula, O., near the existing U.S.I. sodium-chlorine plant. Acquisition of the giant building is expected to cut six months to a year from U.S.I.'s construction time table.

TECHNICAL DEVELOPMENTS

Information about manufacturers of these items may be obtained by writing the Editor, U.S.I. Chemical News.

Basic formulations for a new type aerosol skin bandage are now being offered to aerosol marketers and contract fillers in the drug field. After spraying on, the dry films reportedly adhere well, are transparent and tough **No. 1180**

"What's Available on Microprint Cards", a free 8-page booklet, can now be obtained which lists the technical literature which has been put out in this form. This bibliography is divided by subject, includes works on chemistry, mathematics and physics among others. **No. 1181**

A 125-page report on zirconium can be purchased which covers its chemistry, properties, production and fabrication—from both the economic and technological standpoints. **No. 1182**

New synthetic resin in 2 types — anionic and cationic — are offered as permaselective ion exchange membranes. Other possible uses are suggested by film properties of strength, toughness, flexibility and freedom from static. **No. 1183**

A summary on amino acid research can now be purchased which covers: the effects of DL-methionine supplements on animals; the effects of amino acid imbalance on maintenance and growth; and the amino acid needs of children. **No. 1184**

Acrylic thickener recently developed is shipped as high-solids, low viscosity acidic emulsion, is diluted and neutralized to clear, viscous, low-solids solution at point of use. Said to have long-term stability. **No. 1185**

Radioactive phenol — C^{14} (uniformly labelled) is now being offered as a tracer or synthetic intermediate in studying plant and animal chemistry, and as an aid in analyzing products such as insecticides, medicinals, plastics. **No. 1186**

Polyethylene-based ointments containing antibiotics and other pharmaceuticals are now available. Polyethylene replaces petroleum in part in these preparations, and is said to release more medicine at a slower rate. **No. 1187**

The dipotassium salt of (ethylenedinitrilo) tetraacetic acid is now offered as a chelating agent. Has better solubility in alcohol than the sodium salt. Material is a white solid, soluble in water. **No. 1188**

A new gun for extruding caulking compounds has been devised in which air pressure forces the compound out of a disposable polyethylene cartridge through a polyethylene nozzle screwed to it. Smooth, automatic operation is claimed. **No. 1189**

PRODUCTS OF U.S.I.

INORGANIC CHEMICALS:

Sodium, Metallic: cast solid in tank cars, steel drums, pails; bricks in barrels, pails.
Chlorine: liquid, in tank cars.
Caustic Soda: 50% liquid, in tank cars.
Sodium Peroxide: dust-free granules, in drums.
Sulfuric Acid: all strengths, 60° Baumé to 40% Oleum. Also Electrolytic grade to Federal specifications. Tank cars or tank wagons.
Ammonia: Anhydrous, commercial and refrigeration. Tank cars or tank wagons. Also Nitrogen Fertilizer Solutions.

OTHER PRODUCTS:

Alcohols: Ethyl (pure and all denatured formulas), Normal Butyl, Amyl, Fusel Oil; Proprietary Denatured Alcohol Solvents SOLOX®, FILMEX®, ANSOL® M, ANSOL® PR.

PETROTHENE® Polyethylene Resins.

Esters, Ethers and Ketones: Normal Butyl Acetate, Dibutyl Phthalate, Diethyl Carbonate, Diethyl Oxalate, Ethyl Acetate, Ethyl Ether, Acetone.

Intermediates and Fine Chemicals: Acetoacetarylides, Ethyl Acetoacetate, Ethyl Benzoylacetate, Ethyl Chloroformate, Ethylene, Ethyl Sodium Oxalacetate, Sodium Ethylate solution, Urethan USP (Ethyl Carbamate).

Animal Feed Products: Calcium Pantothenate, Choline Chloride Products, Curbay B-G® 80, Special Liquid Curbay®, DL-Methionine, Niacin USP, Riboflavin Concentrates, Vitamin B_{12} and Antibiotic Feed Supplements, Vacatone® 40, Vitamin A, D_3 and K_3 products.

Pharmaceutical Products: DL-Methionine, N-Acetyl-DL-Methionine, Riboflavin USP, Urethan USP, Intermediates.

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Phthalic anhydride, bgs., c.l., works, frt. equald ..lb. .21 - —
l.c.l., same basis ..... lb. .22 - —
tanks, same basis ..... lb. .20½- —
Phthalimide, 97%-98%, dms., frt. equald lb. .65 - —
Phthalylsulfacetamide, 1,000-lb. lots or more lb. 5.00 - —
NF ..... lb. 5.20 - —
a-Picoline, ret. dms., c.l., works, frt. equald lb. .43 - .43½
l.c.l., works, frt. equald .... lb. .44 - —
tanks, same basis ..... lb. .415 - .422
b,g-Picoline 5°C. dms. c.l., works, lb. .32½- —
l.c.l. works lb. .33 - —
g-Picoline 98% dms., works .. lb. 2.00 - —
Pilocarpine hydrochloride, USP, bots oz. 4.75 - 5.25
Nitrate, USP bots. vials oz. 4.65 - 4.75
Pimento, Jamaican, bgs..... lb. .72 - —
Mexican, bgs..... lb. .36 - —
Pink root, bls..... lb. 2.50 - —
Piperazine, crude, dms., c.l., works, lb. 3.15 - —
l.c.l., works ..... lb. 3.30 - —
Hexahydrate, French Codex, bots, kilo. 8.00 - 8.50
Piperidine dist. dms. frt equald lb 2.60 - 2.70
Piperonyl butoxide, dms. dlvd E lb 4.50 - 5.05
Pitch, coaltar, bulk, aluminum, works ton.40.00 -42.00
carbon and industrial, works, ton.40.00 - —
core, works ..... ton.36.50 - —
fiber, works ..... ton.44.00 - —
roofing, 140-155°F., Fed. Spec. RP-381, Type I, tanks, works ton.39.00 - —
Cottonseed raw, dms. works lb. .03 - .03¼
tanks, same basis..... lb. .02¾- —
Linseed, dms ..... lb. .06 - .06¾
Marine, dms ..... lb. .04¼- .05
Petroleum (see Asphalt, petroleum).
Soybean, dms., works ..... lb. .05 - .05½
Tall, dms., c.l., works .....ton.50.00 -70.00
tanks, works.....ton.30.00 -40.00
Plaster of Paris (see Gypsum).
Platinum metal, works ....oz.105.00 -107.00
Pleurisy root bls ....lb .45 .50
Podophyllum resin, NF, dms.. .lb.15.60 -16.10
Poke root bls lb. .19 .22
Polymyxin, bulk, bots. dms., 50 billion units or more, 1,000,000 units. .52 - —
25-50 billion units 1,000,000 units. .54 - —
1-25 billion units 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate dms. 20,000-lb. lots, works lb. .41 - —
10,000-20,000-lb lots works, lb. .43 - —
smaller lots works lb. .46 - .48
Tristearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000 lb lots works, lb. .43 - —
smaller lots works lb. .46 - .48
Poppy seed, Argentine, bgs.....lb. .24 - —
Dutch, bgs.....lb. .28 - —
Iranian bgs .....lb. .14½- .15
Polish, bgs .....lb. .27½- —
Turkish, bgs.....lb. .24 - —
Potash caustic reg. flake, 88-92% dms., c.l., works 100 lbs. 9.15 - —
l.c.l., works 100 lbs.10.20 - —
liq., 45% basis dms. c.l., works 100 lbs. 4.25 - —
l.c.l., same basis 100 lbs 5.05 - —
tanks, same basis 100 lbs. 3.70 - —
solid, 88-92%, dms., c.l., works, 100 lbs. 8.70 - —
l.c.l. works .... 100 lbs. 9.75 - —
Potassium acetate, NF dms lb. .31 - .36
Bicarbonate, USP, gran., dms lb. .22 - —
powd. dms lb. .24 - —
Bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
l.c.l., works ..... lb. .18½- .19¾
Potassium bichromate in dms. ¾c. higher.
Bitartrate, NF, dom., gran. or powd., bbls. 5,000 lbs., 1 ship't. lb. .40½- —
dms., c.l..... lb. .40 - —
smaller lots..... lb. .41 - .43
imp., kgs..... lb. .32 - .35
Bromate dms. 1,000 lbs. or more, lb. .50 - —
25-200-lb lots lb. .52 - .62
Bromide, USP, gran., bbls., kgs, lb. .37 - .38
Carbonate NF gram., bbls., dms, lb. .20 - —
powd., bbls., dms..... lb. .21 - .22
tech., calcined, bbls., c.l., works, 100 lbs. 9.00 - —
l.c.l., same basis 100 lbs.10.05 - —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 8.65 - —
Chlorate cryst. dms., c.l., works, lb. .11¼- —
l.c.l., works..... lb. .11½- .12½
powd., dms., c.l., works...lb. .11¾- —
l.c.l., works..... lb. .12 - .13
NF, gran., 25-lb. metal dms lb. .36 - —
Chloride, agricultural (see Potassium muriate),
indust 99.9% KCl, bulk, c.l., works ton.29.00 - —
bgs., c.l., works.....ton.33.50 - —
99.3% KCl, bulk, c.l., works, ton.27.00 - —
bgs., c.l., works.....ton.31.50 - —
USP, cryst., dms..... lb. .21 - .23
gran., dms ..... lb. .15 - .17
powd. dms ..... lb. .24 - .26
Chromate, tech., bgs. ..... lb. .50 - .50½
Citrate, USP, gran., dms..... lb. .43 - —
powd. dms ..... lb. .40½- .41½
Cyanide dms. 20,000-lb. lots or more, works lb. .45 - —
2,000-19,999-lb lots, works lb. .455 - —
smaller lots, works lb. .465 - —
Dichromate (see Potassium bichromate)
Ferricyanide dms., ton lots, works, lb. .50 - —
smaller lots, works ..... lb. .65 - —
Ferrocyanide, bgs., ton lots.... lb. .23 - —
smaller lots ..... lb. .23½- —
Fluoborate 6h dms., c.l., works lb. .30 - —
l.c.l. works ..... lb. .31 - —
Fluoride, dms., works ..... lb. .37 - .38
Gluconate, dms. ..... lb. 1.60 - —
Guaiacolsulfonate, NF, dms lb. 2.10 - 2.30
Hydroxide, tech. (see Potash caustic).
USP, pellets 100-lb. dms. 1 to 100-dm. lots lb. .28½- .33
Hypophosphite, NF, fib. dms., ton lots or less lb. 1.00 - 1.03
Iodide, dms ..... lb. 1.90 - 1.95
Metabisulfite, gran., dms. .... lb. .20 - .21
powd., dms ..... lb. .25 - —
Muriate, standard and granular, 59-63% K_2O, bulk, c.l., works, base price, unit-ton. .36 - —
July forward unit-ton. .38 - —
granular, 60-63% K_2O, bgs., c.l., works, base price ton.26.25 - —
July forward ... ton.27.45 - —
Nitrate, NF, cryst., bbls., 20-ton lots..100 lbs.16.50 - —
smaller lots.....100 lbs.17.50 -18.00
gran., bgs., 20-ton lots..100 lbs. 9.25 - —
smaller lots .....100 lbs.10.50 -11.00
powd., bgs., 20-ton lots..100 lbs.10.25 - —
smaller lots.....100 lbs.11.50 -12.00

Potassium oxalate, neutral, tech., fine gran., bbls., dms..lb. .30 - .31
Pentaborate, gran., bgs., c.l., works, ton.191.50 - —
dms., ton lots, ex whse ton.198.00 - —
smaller lots, ex whse ton.302.50 - —
Powdered potassium pentaborate $10.25 per ton higher
Perchlorate, dms., c.l., works..lb. .18½- —
l.c.l., works..... lb. .19 .20
Permanganate, coml., kgs., works, lb. .26 - .29
USP, dms., works.....lb. .29¼- .31
Persulfate, bbls., c.l., works lb. .16½- —
dms., 5-ton lots, works .... lb. .18 - —
1-ton lots, works ..... lb. .20 - —
Pyrophosphate, tetrabasic, dms., works lb. .15½- .18½
Prussiate red (see Potassium Ferricyanide).
yellow (see Potassium Ferrocyanide)
Silicate, glass bgs., c.l., works, 100 lbs.17.00 -17.30
l.c.l., works ..... 100 lbs.17.80 - —
soln., clarif., 29° Be, 1:2.5, dms., c.l., works 100 lbs. 5.80 —
l.c.l., 5 dms. or more works 100-lbs 6.55 6.95
tanks, works 100-lbs 5.45 —
electrical grade, 29° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
l.c.l., 5 dms. or more, works 100 lbs. 7.25 7.65
tanks, works 100 lbs. 6.15 —
40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 6.45 —
l.c.l., 5 dms. or more works 100 lbs. 7.20 7.60
tanks, works ...100 lbs. 6.10 - —
Silicofluoride, bgs., works..... lb. .09½- .10
tanks, works....100 lbs. 6.10 - —
Potassium silicofluoride in drums, 0.4c per lb higher

Potassium stannate, dms., frt. alld, E lb. .725 - .791
Sulfate agricultural, 50% K_2O, bulk, works, base price, unit-ton. .64 - —
July forward unit-ton .67 —
NF VII, cryst., dms ..... lb. .31 .33
gran., dms ..... lb. .18½- —
powder, dms.....lb. .16 - .17
Sulfocyanate, NF, cryst., (see Potassium thiocyanate)
Thiocyanate NF, cryst., dms lb. .84 94
tech., works ..... lb. .77 79
Titanate, ctns., c.l., works .. lb. .14 —
5-ton lots, works ... lb .14½- —
1-ton lot or less, works lb. .14¾- —
Toluene sulfonate, dms., c.l., or t.l., works lb. .42 - —
l.c.l., works lb. .46 - —
Potassium-magnesium sulfate, bulk, works, basis 40% K_2SO_4, 18% MgO base price ton.13.45 - —
July forward ton.14.00 - —
Potassium-sodium tartrate, NF, gran. powd., dms., c.l. lb. .42½- —
5,000-lb. lots ..... lb. .43 - —
smaller lots ..... lb. .43½- .49
Potassium-titanium fluoride, fib. dms. works lb. .39 .40
Potassium-zirconium fluoride, fib. dms, c.l., works lb. .50 - —
l.c.l., works lb. .52½- .55
Methyl ether dms., c.l., dlvd lb. .20 - —
l.c.l. same basis lb. .21 - —
tanks, same basis.... lb. .18½- —
Pregnenolone, bots. ..... gram. .45 - —
Acetate, bots. ..... gram. .40 - —

Procaine hydrochloride, USP dms., 1,000-lb. lots, frt. alld lb. 2.83 - —
100-500-lb lots ..... lb. 2.95 - 3.15
Progesterone, USP bots., 100 gram lots gram .50 - —
Acetate, bots. gram .70 - —
Propane, indust., tanks, group 3 gal. .05 - —
N. Y. Harbor ..... gal. .093 - —
n-Propyl acetate, dms., c.l., dlvd. lb. .13¼- —
l.c.l., dlvd ..... lb. .14¼- —
tanks, dlvd ..... lb. .11¼- —
Gallate, dms., 100 to 2,000-lb. lots, works lb 3.90 4.40
p-Hydroxybenzoate, USP, dms lb 2.30 2.40
Propyl thiouracil, bots., 50-kilo lots or more kilo.55.00 —
smaller lots kilo.55.10 -55.30
Propylene dichloride, dms. c.l., dlvd. E lb. .09½- —
l.c.l., same basis ..... lb. .10½- —
tanks, same basis ..... lb .07 —
Propylene dichloride prices in West 1c. higher dlvd. on same basis.
Glycol, indust., dms., c.l., dlvd. E, lb. .16 - —
l.c.l., same basis ..... lb. .17 - —
tanks, same basis ..... lb. .13½- —
USP, dms., c.l., dlvd. E lb. .18 - —
l.c.l., same basis ..... lb. .19 - —
tanks, same basis ..... lb. .15½- —
Oxide, dms., c.l., dlvd. E lb. .17½- —
l.c.l., dlvd. E ..... lb. .18½- —
tanks, dlvd. E. ..... lb. .15½- —

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Methylene Chloride • Monochlorobenzene • Ammonium Bicarbonate
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Company _____
Title _____
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City _____ Zone ____ State _____ DU-12

Psyllium seed, black, bgs..... lb. .28 • .30
blonde, bgs. ..... lb. 18 • —
husks, bgs. ..... lb. 40 • —
Pumice dom., grd., coarse to fine, 0 ½ 1, 1½ 2, 3, bgs., ton lots lb. .03⅝ .04¼
smaller lots lb. .03⅞ .04½
Imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½ • —
fine, bgs. ton lots lb. .04 • —
sun dried, coarse, bgs....ton 58.00 • —
Pumpkin seed, bgs lb .23 .26
Pyrethrin, syn (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls., works lb. .45 • —
powd., 1.3% pyrethrins, bbls., works lb. .65 • —
liq. 20:1 basis (2 grams pyrethrins per 100cc odorless base), 100:1 basis (10 grams pyrethrins per 100cc odorless base) dms., works gal. 41.75 42.75
oleoresin dewaxed, 20% dms., works lb. 10.00 —
purif. 20% dms. works lb. 10.00 10.10
Pyridine, denaturing, dms., c.l., works and frt. equald gal 2.77 • —
t.c.l., same basis gal 2.80 • —
refd., 2° non-ret. dms., t.c.l., same basis lb. .75 • —
Pyridoxine hydrochloride, bots., 100-gram lots gram .37½ • —
Pyrites, Canadian, works long-ton 3.00 5.00
Pyrocatechol (see Catechol)
Pyrogallol, NF, 100 lb. dms..... lb. 3.50 • —

Pyroxylin scrap, ungrd., amber, dms., works lb. .20 • —
black, dms., works lb. .12 • —
mixed mottled dms. works lb. .13 • —
shavings, amber, cs., works lb. No stocks.
mixed colors, dms., works lb. .11 —
white, china, ivory, dms., works lb. .16 • —
dense opaque dms. works. lb. .12 • .15
translucent pastels, cs., works. lb. .14 • —
colors, dms., works..... lb. .16 • —
USP bots lb 9.50 —

Q

Quassia chips ..... lb. .17 • —
Quebracho extract, clarif., grd., 70% tannin bgs. c.l., lb. .16½ .16¾
liq., 35% tannin bbls. works. lb. 08¼ 08½
solid, clarif., 64% tannin, bgs., c.l., ex-dock, duty extra lb. .12 23 64
ord 63% tannin, bgs., c.l. same basis lb 11 21 32 —
Quercitron extract, cryst., No. 1, bbls., t.c.l. lb .40 • —
liq., No 1, bbls t.c.l lb 19 • —
Quicksilver (see Mercury metal)
Quince seed, bgs ..... lb 2.00 Nom
Quinidine sulfate, USP, cns., 100-oz. lots oz. .73 .75
Quinine, NF, cns., 100-oz. lots oz. .54 • —
Bisulfate, USP, cns., 100-oz. lots. oz. .37½ • —
Hydrochloride, cns., 100-oz. lots oz. .35 • .47½
Sulfate, USP, cns., 100-oz. lots oz. .29 • .35
Quinoline dms., c.l., frt. equald lb. .50¾ • —
t.c.l., same basis ..... lb. .51¼ • —
tanks, same basis ..... lb. .50 • —

R

R salt, paste, dms., frt. alld., 100% basis lb .88 • —
powd. frt alld. 100% basis lb. .98 • —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.75 • —
Red, BON acid maroons, pure, bbls., lb. 1.75 • —
resinated, bbls lb 1.50 • —
arylid, deep shades, bbls lb 3.60 • —
light shades, bbls lb 2.75 • —
maroon bbls lb 3.60 5.90
Cadmium, CP, dark shade, bbls., frt. alld. E. of Rockies lb. 4.30 • —
light shade bbls. same basis. lb. 4.00 • —..
medium shade, bbls. same basis lb. 4.25 • —
medium light shade, bbls., same basis lb. 4.05 • —
orange shade, bbls., same basis lb. 3.95 • —
orange red bbls. same basis. lb 1.81 • —
Selenide, lithopone, maroon shade, bbls., same basis lb. 3.77 • —
dark, bbls., same basis. lb. 3.90 • —
red shade, dark, bbls., same basis lb. 3.44 • —
light, bbls., same basis. lb. 2.24 2.32
Red, Cadmium selenide lithopone, red shade, medium, bbls., same basis lb. 2.99 • —
medium light, bbls., same basis lb. 2.49 • —
Mercury lithopone, dark shade, bbls., same basis lb. 2.40 • —
light shade, bbls., same basis. lb. 1.95 • —
medium shade, bbls., same basis lb. 2.25 • —
medium light shade, bbls., same basis lb. 2.10 • —
Carmine No. 40 (see Carmine).
Dyes (see Dyes, coaltar).
Eosin toner, bbls., works .. lb. 1.65 • —
Indian, dom., pure, bgs., Bethlehem, Easton, E St. Louis, N. Y lb. .12¾ • —
Iron oxide, nat., 75-85% ferric oxide, bgs., t.c.l., Bethlehem Pa., Copley, O., Easton, Pa., bgs., c.l., works lb. .0675 • —
Lake C toner, alizarine, bbls., works lb. 1.13 • —
Lithol toner, bbls., works..... lb. .85 • —
rubine toner, pure, bbls, works. lb. 1.50 • —
resinated, bbls., works lb. 1.40 • —
Virginia type, bbls., works lb. 1.40 • —
Maroon toner, MNPT, kgs., c.l., works lb. 3.60 • —
10,000-lb. lots, works lb. 4.22 • —
smaller lots, works lb. 4.24 • —
Mercury oxide, tech., c.l., works. lb. 5.77 • —
Metallic, bbls., c.l., works lb. 02½ • —
t.c.l., works lb. 02¾ • —
Naphthol, ITR, bbls., works.. lb. 5.25 • —
Oxide (see Red iron oxide).
Persian Gulf, bgs., c.l., works. lb. .07¾ • —
t.c.l., works..... lb. .08 • —
Para toner, bbls..... lb. 1.10 • —
chlorinated, kgs ..... lb 1.10 1.15
Phloxin toner (see Red eosin toner)
Rhodamine, molybdated, PMA, kegs lb. 5.35 5.60
tungstated, PTMA, works, kegs lb. 6.40 • —
Spanish oxide, bbls., c.l., ex-dock. lb. .05¾ • —
t.c.l., ex dock lb. .06 • —
ex whse., New York lb. .06½ • —
Toluidine toner, deep shades, kgs., works lb. 1.62 • 1.65
light shades, kgs. works lb 1.62 1.65
Turkey, bbls., works lb. .62 • —
Tuscan, bbls., frt. equald lb. .26 .32
Venetian, jobbing, bgs., works lb. .0475 • —
lb. .0475 • —
20%, bgs., works..... lb. .0525 • —
25%, bgs., works..... lb. .0575 • —
30%, bgs., works..... lb. .06 • —
35%, bgs., works ..... lb. .0625 • —
40%, bgs., works ..... lb. .0675 • —
Watchung-type bbls ..... lb 1.95 —
Red KB base (see 4-Chloro-2-aminotoluene).
Red, precipitate (see Mercuric oxide, red)
Red saunders, NF, powd. bbls lb. .35 .40
Reserpine, cryst., bots .....gram. 3.75 • —
Resorcinol, tech. grade, dms., c.l., works, frt. equald lb. .77½ • —
t.c.l., same basis ..... lb. 78½ • —
USP, dms., works ..... lb. 2.75 • —
powd., dms., works..... lb. 2.93 • —
Monoacetate, NF, dms..... lb 3.00 • 3.25
Rhatany root, bgs ..... lb .15 .16
Rhodinol, 5-lb. cans..... lb. 32.00 • 36.00
Rhubarb root, India, whole, bgs. lb. .30 • —
powd., bbls ..... lb. .38 • —
Riboflavin, USP, bots., dlvd kilo. 65.00 • —
readily soluble, bots., dlvd kilo. 130.00 • —
5'-phosphate-sodium, bots., 100-kilo lots or more kilo. 125.00 • —
Rochelle salt (see Potassium-sodium tartrate).
Roofing pitch (see Pitch, coaltar, roofing)
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works, unit-lb. .12 • —
resin, 25-43% fib dms., works, unit-lb. .12 • —
Rottenstone, bgs., 5-ton lots, ex-whse. lb. .03¾ • —
ton lots, same basis..... lb. .04¼ • —
Rutin, NF, fib. dms., 10 kilo lots. kilo. 17.00 • —
5 kilo lots..... kilo. 17.50 • —
1 kilo..... kilo. 18.50 • —
Ryania, 100%, powd., bgs., c.l., works lb. .22 • —
t.c.l., same basis ..... lb. .24 • —

S

Sabadilla seed, powd., bbls..... lb. .49 • .49¼
activated, ground with lime, bbls. lb. .30 • .32
Saccharin, USP, cryst., soluble, dms., 1000-lb. lots lb. 1.60 • —
smaller lots lb. 1.70 • 1.80
powd., soluble, insoluble, dms., 1,000-lb. lots..lb. 1.65 • —
smaller lots lb. 1.75 • 1.95
Calcium, fib dms., 1,000-lb. lots, works lb 2.50 • —
Saffron, Spanish, USP, tins .....lb. 45 00 • —
Safrol, dms .....lb. .90 • 1.05
Sage, Cretan, bgs.....lb. .11 • —
Dalmatian, bgs. .....lb. .44 • —
Italian .....lb. .26 Nom.
Sago flour, raw, bgs.....lb. .07 .07¼
refd., bgs .....lb. .08½ .09
Sal soda (see Soda sal).
Salicylamide, 100-lb. dms.....lb. 1.25 • —
Salol, NF, gran., bbls., kgs ... lb. 1.15 • —
Powdered salol 25c higher
Salt, rock, paper bgs., c.l...100 lbs. 1.02½ • —
table, vacuum, common, fine, paper bgs., c.l. 100 lbs. 1.27½ • —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton. 28.00 • —
Saltpeter (see Potassium nitrate).
Sandalwood, East indies chips bgs. .65 • .66
powd., fib. dms lb. .75 • .76
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .95 • —
powd. bgs., frt. alld. 100% basis. lb. .95 • —
Scopolamine hydrobromide, USP, bots oz. 13.50 • 16.50
Seidlitz mixture, bbls., 5,000-lb. lots lb. .30½ • —
smaller lots lb. .31 • .32
Selenium, powd., 99½%, dms., dlvd. lb. 13.50 • 15.50
Senega root, bls.....lb. 2.75 • —
Senna leaves, Alex. whole and half, bls lb. .19 • —
siftings .....lb. .17 • —
Tinnevelly, No. 1, bls.....lb. .16 • .18
No. 2, bls. .....lb. .13 • .15
No. 3, bls.....lb. .11 • .13
powdered, bbls., bxs.....lb. .15 • —
pods, bls. .....lb. .14 • —
Serpentaria root, bls..... lb. 5.50 • —
Sesame seed, Egyptian, hulled, bgs. lb. .22½ • —
nat., bgs. .....lb. .17 • —
Nicaragua, hulled, shipt., bgs. lb. .25 • —
nat., bgs .....lb. .16½ • —
Salvadorian, natural, bgs.....lb. .21½ • —
Indian, natural, bgs. ..... lb. N.P.
Shellac, bleached, bonedry, bgs., 2,500-lb. lots..lb. .54 • —
bbls., 1,500-lb. lots.....lb. .55 • —
kgs., 1,500-lb. lots.....lb. .56 • —

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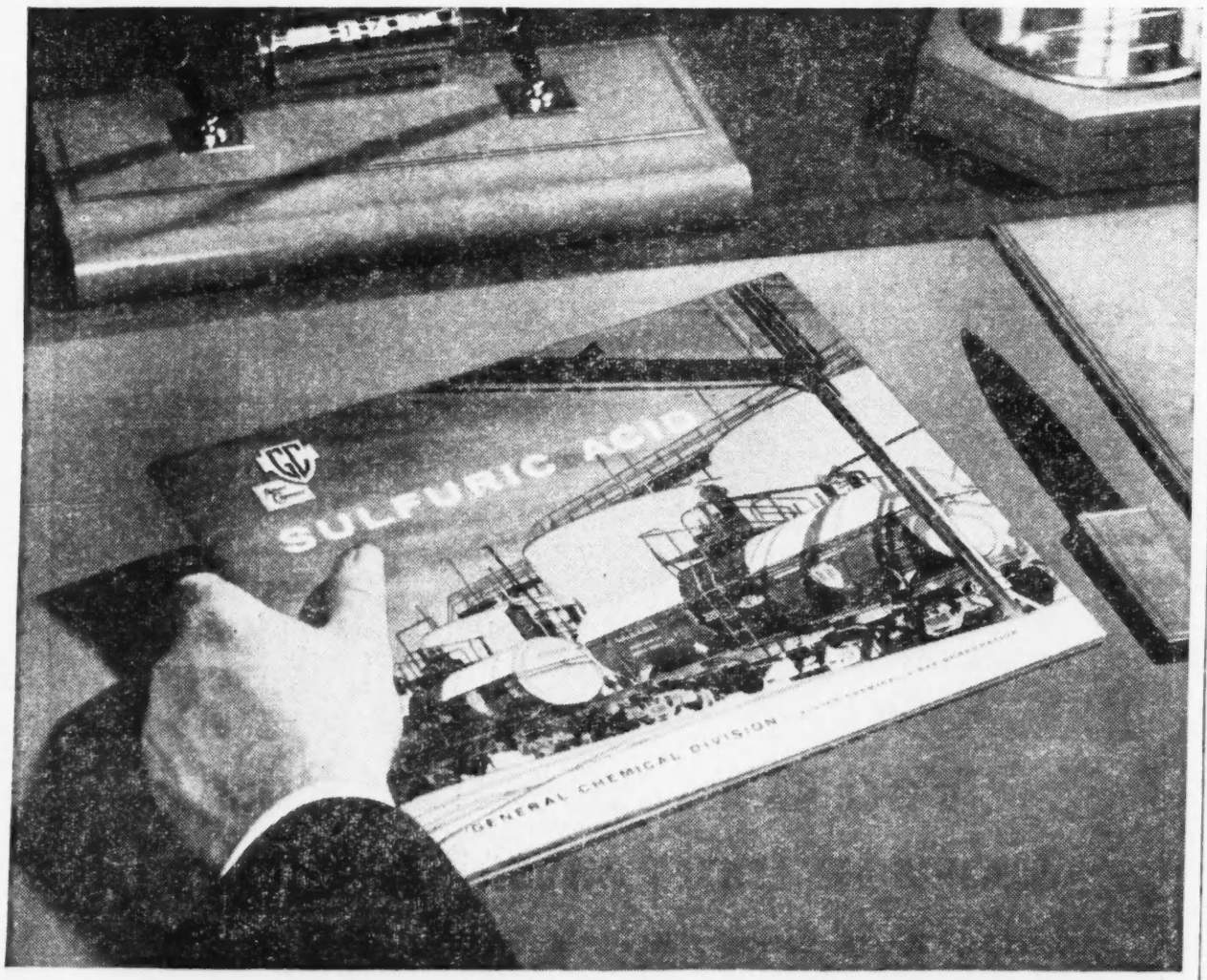

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Shellac, bleached, refd., bgs., 1,500-lb. lots..lb. .64 - —
bbls., 1,300-lb. lots.....lb. .65 - —
kgs., 1,500-lb lots.....lb. .66 - —

Bonedry shellac prices for less than 1,500 lb. lots 1c. per lb. higher for all packages.

Lemon, No. 1, bgs., 10-bg. lots..lb. .47 - —
No. 2, bgs., 10-bg. lots ....lb. .45 - —
Superfine, bgs., 10-bg. lots....lb. .44 - —
Shellac in 1 to 10-bg. lots 1c per lb. more.
Shingle stain oil (see Oil shingle stain)
Silica, amorph., dry-grd. 325 mesh, bgs., c.l., works ton 25.00 —
t.c.l., works, exwnse ton.45.00 -55.00
hard-quartz, 99½%, 325 mesh, bgs., c.l., works ....ton.20.00 —
t.c.l., works ....ton 25.00 -30.00
140 mesh bgs. c.l., works ton 15.00 —
t.c.l., works ton 20.00 —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 - —
t.c.l., works lb. .22 - .30½
tanks, works lb. .17 —
Silver bullion, ingots, cs.... Troy oz. .91⅜- —
Cyanide fih dms., 2,500-oz. lots. oz. .87 - —
1,000-oz. lots..... oz. .87⅜- —
500-oz. lots ..... oz. .87½- —
100-oz. lots..... oz. .87⅝- —
Nitrate, CP, cryst., bots., 2,500-oz. lots..oz. .62⅜- —
1,000-oz. lots..... oz. .63⅛- —
500-oz. lots..... oz. .64⅛- —
250-oz. lots..... oz. .64⅝- —

USP granular silver nitrate 4c per oz higher.

Proteinate mild USP, bots., dms., 1,000-oz. lots ..oz. 1.15 - —
strong, NF bots. dms. 1,000 oz. lots ..oz. 1.10 - —
Soapbark, whole, bls. ..... lb. .38 - .40
crushed bls., bbls ..... lb. .45 - —
powd., bbls. ..... lb. .45 - —
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
l.c.l., stock points 100 lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.60 - —
light, 58%, paper bgs., c.l., works 100 lbs. 1.83 - —
l.c.l., stock points 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76% dms., c.l., works, frt. equald 100 lbs. 4.70 - —
l.c.l., stock points 100 lbs. 5.80 - —
liq., 50%, sellers tanks, works, dry basis 100 lbs. 2.90 - —
rayon type, sellers, tanks, works, dry basis 100 lbs. 2.90 - 3.00
73%, sellers' tanks, works, dry basis 100 lbs. 3.00 - —
rayon-type, sellers' tanks, works, dry basis 100 lbs. 3.00 - 3.10
solid, 76%, dms., c.l., works, 100 lbs. 4.30 - —
l.c.l., stock points 100 lbs. 5.30 - —
Sal. conc., bgs., c.l., works 100 lbs. 2.50 - —
smaller lots, works 100 lbs. 2.80 - —
Sodium acetate anhyd. ogs., c.l., frt. equald lb. .13 - —
dms., l.c.l., frt. equald.... lb. .13¾- —
NF, 60% gran dms., c.l., works lb. .14 —
l.c.l. works lb. .15½- —
Alginate, NF white powd., dms., 300 lbs. or more lb. .93 - —
p-Aminobenzoate, dms. 1,000-lb. lots or more..lb. 2.35 - —
smaller lots.....lb. 2.45 - 2.55
p-Aminosalicylate, dms., 100 lbs. or more, frt. adjusted lb 2.70 —
Antimoniate, bbls. c.l., dlvd. E. lb. .28 - —
l.c.l., dlvd. E.....lb. .29½- —
Arsenate, 45% arsenic pentoxide, dms., c.l., works.... lb. .12½- —
l.c.l., works.....lb. .13¾- .14½
Arsenite 90%, pink powder, 75% arsenious oxide, dms., works lb. .12¼- —
t.c.l., works.... lb. .13 - .14½
soln. dms.. works gal. .59 - .67
Ascorbate, dms., 25-50 kilo lots. kilo.12.00 - —
10-kilo lots.....kilo.12.35 - —
5-kilo lots.....kilo.12.75 - —
1-kilo lots.....kilo.13.00 - —
bots., 500-gram lots.....kilo.13.50 - —
Benzoate, tech., bbls., dms., lots or more lb. .39 - —
USP bbls., dms. 100-lb. lots. or more lb. .46 - —
Bicarbonate, USP, gran., bgs., c.l., works..100 lbs. 2.95 - —
t.c.l., works.....100 lbs. 3.85 - —
powd., bgs., c.l., works, 100 lbs. 2.55 - —
t.c.l., works.....100 lbs. 3.45 - —
Bichromate, gran., bgs., c.l., t.l., works..lb. .13 - —
t.c.l., works.....lb. .13½- .14¾
Bifluoride, bbls., c.l., works, frt. equald..lb. .19½- —
t.c.l., same basis.....lb. .1990- —
Bisulfate, bulk., c.l., works 100 lbs. 2.00 - —
dms., c.l., frt. equald 100 lbs. 3.00 - 3.60
t.c.l., frt. equald.....100 lbs. 3.50 - 4.10
Bisulfite, anhyd., bgs., c.l., works, 100 lbs. 5.00 - —
t.c.l., works.....100 lbs. 5.40 - —
soln. 35° bbls., c.l., works, 100 lbs. 1.53 - —
t.c.l., works... 100 lbs. 2.05 - —
Borate (see Borax).
Bromide, USP, bbls., works....lb. .38 - —
Carboxymethyl cellulose (see CMC).
Carbonate, cryst., monohydrated (see Soda, sal).
monohydrated, bgs., c.l., works, 100 lbs. 3.10 - —
l.c.l., works.....100 lbs. 3.50 - —
Chlorate, cryst., dms., c.l., works, lb. .09 - —
l.c.l., works.....lb. .09½- .10½
Chloride, tech (see Salt).
USP, dms., 300 lbs. or more..lb. .08 - —
Chlorite tech. dms., c.l., works, lb. .58 - —
20-ton lots or more, works, lb. .68 - —
smaller lots, works lb. .70 - .73
Chloroacetate, tech., dms., c.l., works..lb. .27 - —
t.c.l., works lb. .28 - —
Chromate, anhyd., fiber dms., c.l., t.l., works..lb. .14¾- —
t.c.l., same basis.....lb. .15¼- .16½
tetrahydrate, bgs., c.l., t.l., works..lb. .1015- —
t.c.l. .....lb. .1063- .1190
Citrate, anhyd., dms .....lb. .62 - —
NF VIII, gran., dms.....lb. .26½- .27½
USP, XIV gran., dms.....lb. .29½- .30½
Sodium citrate, USP, powd. prices ½c higher.
Cyanate, dms., 1,000-lb. lots, works lb. .83 - 1.10
smaller lots, works lb. 1.00 - 1.25
Cyanide flake, 96-98%, dms., c.l., or 20,000-lb. lots.....lb. .178 - —
over 1,000-lb. lots .....lb. .188 - —
100-lb. to 1,000-lb lots lb. .198 - —

Granular sodium cyanide 1c. higher.

Sodium diacetate, 33-35% acidity, 250-lb. dms., works..lb. .15 - —
t.c.l., works lb. .15¾- —
anhyd., dms., c.l., works lb. .18 - —
t.c.l., works lb. .18¾- —
Ferrocyanide, bgs., 10-ton lots..lb. .13½- —
smaller lots. .lb. .14 —
Fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
t.c.l. works lb. .1430- —
Formate, bgs., c.l., works 100 lbs. 7.60 - —
t.c.l., works 100 lbs. 8.65 —
Gentisate, 100-lb. fib. dms.....lb. 5.50 - —
Gluconate, refd., dms. .....lb. .80 - .83
tech, dms .....lb. .35 —
Glutamate, mono., dms., c.l....lb. 1.20 —
Hydride, dms., works .....lb. 1.80 - 3.00
Hydrosulfide (see Sodium sulfhydrate)
Hydrosulfite, dms., c.l., frt. alld. lb. .24 - —
t.c.l., frt. alld. .....lb. .24½- —
Hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots lb. .18½- .23
technical (see Soda, Caustic)
Hypophosphite, NF, dms., ton-lots or less lb. .95 - .98
Hyposulfite, anhyd., tech., bgs., c.l., works..100 lbs. 7.25 - —
t.c.l., works .....100 lbs. 7.65 - —
photo grade, bgs., c.l., works, 100 lbs. 8.05 - —
t.c.l., works 100 lbs. 8.45 - —
Hexahydrate, pea cryst., bgs., c.l., works 100 lbs. 5.15 - —
t.c.l., works ....100 lbs. 5.55 - —
photo grade, bgs., c.l., works, 100 lbs. 7.75 - —
t.c.l., works ..... 100 lbs. 8.05 - —
Pentahydrate, tech., bgs., c.l., works..100 lbs. 5.15 - —
t.c.l., works .....100 lbs. 5.55 - —
Iodide, USP, bots., dms.....lb. 2.35 - —

Sodium lactate, edible, 50%, cbys., dms., works lb. .21½- —
60% cbys., dms. works lb. .26½- —
tech., 50%, cbys., dms., works.lb. .16½- —
Lauryl sulfate, dms., c.l., dlvd..lb. .19 - —
l.c.l., dlvd.....lb. .19½- .20¾
tanks, dlvd.....lb. .18 - —
Metabisulfite (see Sodium bisulfite).
Metaborate, octahydrate, gran., bgs., c.l., works ton.85.00 - —
ton lots, ex whse ton.137.50 - —
smaller lots, ex whse.ton.142.50 - —
Tetrahydrate, dms., c.l., works, ton.204.00 - —
ton lots, ex whse.....ton.242.50 - —
smaller lots, exwhse....ton.247.50 - —
Metallic bricks, 14,000-lb. lots or more, works.....lb. .19½- —
fused, 14,000-lb. lots, works, lb. .19 - —
tanks works lb. .16 - —
Metanilate, bbls., frt. alld.....lb. .62 - —
Metasilicate, anhyd., bgs., c.l., works..100 lbs. 5.70 - —
l.c.l., works.....100 lbs. 6.15 - 8.10
dms., c.l.....100 lbs. 6.20 - —
l.c.l. .....100 lbs. 6.65 - 8.53
Pentahydrate, bgs., c.l., works, 100 lbs. 4.45 - —
l.c.l., works .....100 lbs. 4.85 - 6.75
dms., c.l., works.....100 lbs. 4.93 - —
l.c.l., works.....100 lbs. 5.33 - 7.25
Molybdate, anhyd., dms., works, frt. equald lb. .92 - .96
cryst., dms., works, frt. alld. lb. .73 - .74

Sodium monohydrate (see Sodium carbonate monohydrated).
Naphthionate, bbls lb. .70 - —
Nitrate, crude, dom. bgs., c.l., works ton.47.00 - —
bulk c.l. works ton 43.50 - —
tmp 100-lb. bgs., c.l. Atl Gulf, Pac., whse ton.49.50 - —
bulk, c.l. same basis ton.46.00 - —
Nitrite, USP, bbls., c.l., works, frt. equald 100 lbs. 8.50 - —
l.c.l. same basis 100 lbs.10.50 - —
Orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
l.c.l., works .....100 lbs. 7.05 - 7.65
hydrated, flake, bbls., c.l., works, 100 lbs. 5.65 - —
l.c.l., works .....100 lbs. 7.60 - 7.90
Oxalate, 88%, bgs., works 100 lbs.10.85 - —
Para-aminobenzoate (see Sodium p-Aminobenzoate).
Para-aminosalicylate (see Sodium p-Aminosalicylate)
Pentachlorophenate, briquets, bgs., c.l., works, frt equald lb. .26 - —
l.c.l. same basis lb. .27½- .34
pellets, bgs., c.l., same basis lb. .26 - —
l.c.l., same basis lb. .27½- .34
Pentachlorophenate, powd., bgs., dms., c.l., same basis lb. .25 - —
l.c.l. same basis lb. .26½- .33
Sodium pentachlorophenate, 20,000 lbs., min. truckloads, ¼c per lb over carlot prices
Perborate, NF, tech., bgs., c.l., works..lb. .19 - —
t.c.l., works.....lb. .21 - —

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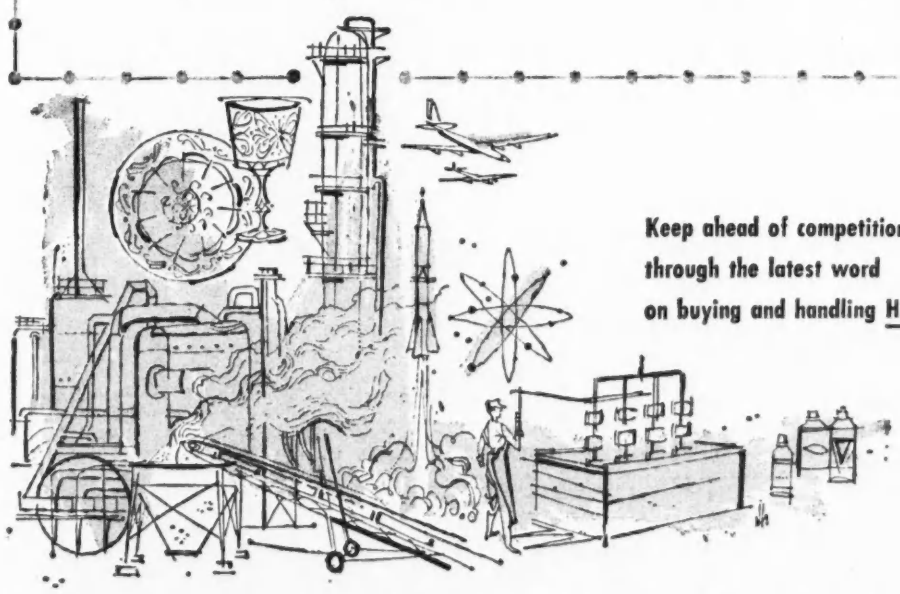
plan for tomorrow



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Sodium Peroxide—Sulfamerazine-Sodium

Sodium peroxide, dms., c.l., dlvd. E. of Miss lb. .20 • —
t.c.l. same basis lb. .20½ - .21
Phenolsulfonate, USP IX, gran., dms lb. .44 - .45
Phosphate, dibasic, anhyd., bgs., c.l., frt. equald 100 lbs 7.65 • —
t.c.l., works 100 lbs. 8.05 - 8.65
duohydrate, bgs., c.l., frt. equald 100 lbs. 7.45 • —
t.c.l., frt. equald 100 lbs. 7.85 - 8.45
USP dried powd bgs., dms., works lb. .19 - .20½
monobasic anhyd., bgs., c.l., frt. equald 100 lbs. 8.70 • —
t.c.l., frt. equald 100 lbs 9.10 - 9.70
tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.00 • —
t.c.l. frt. equald 100 lbs 9.05 - 9.65
cryst., bgs., c.l., t.l., frt. equald 100 lbs. 4.40 • —
t.c.l., frt. equald 100 lbs. 4.80 - 5.40
Sodium phosphates in dms., 60c. higher than bgs.
Prussiate, yellow (see sodium ferrocyanide).
Pyrophosphate, acid, bgs., c.l., works, frt. equald 100 lb. 10.85 • —
t.c.l. works 100 lbs. 11.60 - 11.85
Ferric, dms., c.l., t.l., works lb. .36 • —
t.c.l., works lb. .37 - .39
tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.52½ • —
t.c.l., frt. equald 100 lbs. 7.92½ - 8.52½
Salicylate, USP, dms lb. .74 - .76

Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 • —
t.c.l., dlvd, zone 1 100 lbs. 4.10 - 4.35
zone 2 100 lbs. 4.35 - 4.60
zone 3 100 lbs. 4.75 - 4.90
zone 4 100 lbs. 5.35 - 5.60

Sales zones are: (1) All States E. of Miss., R. and N. of south bound of Ky. and Va., Ala., La., and Miss., south of 31° Tex. E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 93° Ga.; Iowa (except Davenport), Minn., Mo. (except St. Louis), Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98°, N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.

Sesquisilicate, hydrated, bgs., c.l., works 100 lbs. 5.00 • —
t.c.l., works 100 lbs. 5.35 • —
dms., c.l., works 100 lbs. 5.50 • —
t.c.l., works 100 lbs. 5.85 • —
Silicate, liq., 40° Be, 1:3.2, turbid, dms., c.l., works 100 lbs. 1.45 • —
t.c.l., works 100 lbs. 1.80 - 2.30
tanks, works 100 lbs. 1.10 - —
47° Be, turbid, 1:2.9, dms., c.l., works 100 lbs. 2.10 • —
t.c.l., works 100 lbs. 2.70 - 2.95
tanks, works 100 lbs. 1.75 • —

Sodium silicate, liq., 52° Be, turbid, 1:2.4, dms., c.l., works, 100 lbs. 2.45 • —
t.c.l., works 100 lbs. 2.80 - 3.30
tanks, works 100 lbs. 2.10 • —
solid, 1:3.2, bgs., works ton 62.50 • —
Silicofluoride, bgs., c.l., works lb. .075 • —
t.c.l., works lb. .079 • —
Sodium silicofluoride in dms., 0.4c per lb. higher.
Stannate, dms., works, frt. alld. E lb. .616 • .670
Sulfa drugs (see Sulfa name).
Sulfanilate, bbls., works lb. .22 • —
Sulfate, NF, VII, dried, powd., dms lb. .22½ • —
tech., anhyd., bgs., c.l., dlvd. E ton 32.00 • —
detergent, rayon grade, bgs., c.l., works ton 34.00 • —
bulk, c.l., works ton 31.00 • —
USP, cryst., fib. dms lb. .17½ - .18
gran., fib. dms lb. .17½ - .18
Sulfhydrate, flake, 70-72%, dms., c.l., works lb. .06¾ • —
t.c.l., works lb. .07¾ • —
liq. 40-44%, tanks, works, 100% basis ton 120.00 • —
Sulfide, flake, dms., c.l., works, E., frt. equald lb. .05½ • —
t.c.l., same basis lb. .06½ • —
fused, bbls., c.l., works E., frt. equald lb. .05 • —
t.c.l., same basis lb. .06 • —
Sulfite, anhyd., bgs., c.l. 100 lbs. 3.25 • —
t.c.l., same basis 100 lbs. 3.75 • —
Sulfocyanide, CP (see Sodium thiocyanate).
Tetraborate (see Borax).
Tetrasulfide, liq., 40%, dms., c.l., c.l., works lb. .04 • —
t.c.l., works lb. .05 • —

Sodium thiocyanate, CP, dms. lb. .55 • .65
tech., anhyd., dms., 1 ton lots or more, works lb. .317 • —
less than ton lots, works lb. .337 • —
Thiosulfate, NF, cryst., bbls lb. .13½ • —
tech (see Sodium hyposulphite).
Titanate, ctns, c.l., works lb. .10½ • —
5-ton lots, works lb. .10¾ • —
1-ton or less, works lb. .11 • —
Toluene sulfonate, dms., c.l. or t.l. lb. .38 • —
t.c.l. lb. .42 • —
Trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E lb. .37½ • —
t.c.l., frt. adjusted, E lb. .39½ • —
50-lb. dms., c.l. frt. alld. E. lb. .38 • —
t.c.l., frt. adjusted E lb. .40 • —
10-lb. cns., c.l., frt. alld E lb. .44 • —
t.c.l. frt. adjusted E lb. .46 • —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.
Tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.87½ • —
t.c.l., same basis 100 lbs. 8.27½ - 8.87½
Trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.65 • —
t.c.l. works 100 lbs. 9.40 - 9.80
dms., c.l., works 100 lbs. 9.05 • —
t.c.l. works 100 lbs. 9.80 - 10.40
Tungstate, tech., kgs., dlvd. E lb. 2.15 • —
Sodium-ammonium phosphate, bbls., works, frt. equald lb. .23 • —
Sodium-carboxymethyl cellulose (see CMC)
Sodium-cinchophen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 • —
t.c.l., same basis lb. .21½ • —
Sodium-zirconyl sulfate, fiber dms., 1,000-lb lots or more works lb. .28 • —
smaller lots, same basis lb. .30 • —
Solvent naphtha, coaltar, high flash, tanks, frt. equald gal. .31 • .32
petroleum (see Petroleum solvent, partial aromatic)
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .32 • —
10,000 to 20,000-lb. lots, works. lb. .34 • —
smaller lots, works lb. .37 • .39
Tristearate, fib. dms., 20,000-lb. lots, works lb. .33 • —
10,000 to 20,000-lb. lots, works. lb. .35 • —
smaller lots, works lb. .38 • .40
Sorbitol, cryst., resin grade, pellets, dms., c.l., works lb. .23 • —
1 to 5-ton lots, works. lb. .25 • .26
powd., dms., 1 to 5-ton lots, works lb. .38 • .39
soln., comL, aqueous, dms., c.l., works lb. .24¼ • —
ton lots, works lb. .25 • —
smaller lots, works lb. .25¼ • —
tanks, works lb. .23¼ • —
reg. 70% aqueous, dms., c.l., works lb. .16 • —
ton lots, works lb. .16¼ • —
smaller lots, works lb. .17 • —
tanks, works lb 15 • —
ton. 45.00 • —
Soybean meal, 44% bulk, Decatur. ton. 46.50 • —
protein, chemically isolated, bgs., c.l., works lb. .23 • —
mechanically refd. bgs., l.c.l., works lb. .066 • —
Sparteine sulfate, cns oz. .80 • .90
Spearmint leaves, dom., bls lb. 75 • —
Spruce extract, liq., reg. tanks, works lb. .01¾ • —
powd., super, bgs., c.l., works. lb. .05¼ • —
t.c.l., works lb. .05½ • —
Squill, white, bls lb. .16 • .18
powd., bbls., bxs lb. .17 • .20
St. John's bread edible, bls lb. .13 • .15
Stannic chloride, anhyd., dms., works lb. .814 • .824
Oxide, dms., dlvd. E lb. 1.15½ - 1.16½
Stannous chloride, anhyd., dms., works lb. .946 - 1.440
hydrous, cryst., dms., works lb. .82½ - .83½
Sulfate, dms., works lb. .999 - 1.019
Starch, corn, pearl, paper bgs., c.l., 100 lbs. 7.27 • —
t.c.l. 100 lbs. 7.42 • —
powd., paper bgs., c.l. 100 lbs. 7.39 • —
t.c.l. 100 lbs. 7.44 • —
Prices for corn starch in cotton bags, 15c. per 100 lbs. higher
Potato, dom, Idaho, bgs., c.l., works lb. .06 • —
Maine, bgs., c.l., works lb. .06¼ • —
ex whse, N. Y. lb. .06¼ - .09¼
Rice, bgs. t.c.l. lb. .15½ - .16
Wheat, bgs lb. .08½ - .09
Star root (see Helonias root).
Stargrass Root (see Aletris root).
Stavesacre seed, bgs lb. .60 • .61
Stearine oleo (see Oleostearine).
Stramonium leaves, bgs lb. .18 • .20
Soybean meal, 44%, bulk, Decatur.
Streptomycin hydrochloride bulk, gram, lb. .0750 - .0775
Strontium bromide, NF, dms., 150-lb. fib. dms lb. .88 • —
Carbonate, pure, dms., 5-ton lots or more, works lb. .35 • —
1-ton lots, works lb. .37 • —
tech., dms., works lb. .19 • —
Chromate, bbls., works lb. .46 • —
Iodide, pars, 25-lb. lots lb. 3.45 • —
Nitrate, bbls., c.l., works 100 lbs. 11.00 • —
t.c.l., works 100 lbs. 12.00 • —
Salicylate, NF, dms lb. 1.78 • —
Sulfate, air floated, 90%, 325 mesh, bgs., works ton. 56.70 - 66.15
Strophanthin, K., bots. oz. 25.00 - 25.50
G. (see Ouabain, USP).
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 - 3.75
Styrax, USP, cs lb. .78 • .80
Styrene monomer, polymer grade, 99½%, dms., c.l., frt. alld. lb. .22½ • —
t.c.l., same basis lb. .23½ • —
tanks, same basis lb. .21½ • —
synthetic rubber grade, 99%, dms. c.l. frt. alld lb. .18 • —
t.c.l., same basis lb. .19½ • —
tanks, same basis lb. .16 • —
Styrolyl acetate, bots lb. 1.45 - 1.70
Sucrose, refd., white, bgs., refy., E lb. .0885 - —
Octa-acetate, denaturing grade, 100-200-lbs., bgs., t.c.l., works lb. .70 • —
Sugar (see Sucrose).
Sulfabenzamide, dms lb. 4.00 - 4.50
Sodium dms lb. 4.10 - 4.60
Sulfacetamide, fib. dms lb. 4.00 - 4.20
USP, same basis lb. 5.00 - 5.20
Sodium fib dms lb 5.00 - 5.20
USP, same basis lb. 5.20 - 5.40
Sulfadiazine USP, microcrystals, dms lb. 10.60 - 11.10
powd. dms lb. 10.25 - 10.75
Sulfadiazine-sodium, USP, dms lb. 11.25 - 11.75
microcrystals, dms. lb. 11.60 - 12.10
Sulfaguanidine USP dms lb 2.50 —
Sulfamerazine USP, microcrystals, lb. 10.65 - 11.15
Sulfamerazine-sodium, USP, dms., lb. 11.25 - 11.75

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More than 2600 Olin Mathieson tank cars are in service every day shuttling between a score of production points and our customers to assure dependable delivery of Mathieson Chemicals.
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Sulfamethazine, microcrystals, dms., lb. 8.90 - 9.40
powd., dms lb. 8.50 - 9.00
Sulfanilamide, USP 30-80 mesh., dms lb. 1.40 - 1.60
microcrystals, dms lb. 1.70 - 1.90
powd., dms lb. 1.30 - 1.50
Quinoxaline, veterinary, dms lb. 6.40 - 6.75
Sulfapyridine NF powd. bots. tins. lb. 7.00 - 7.50
Sulfapyridine-sodium, monohydrate, dms lb. 7.50 - 8.00
Sulfathiazole, NF, microcrystals, dms lb 2.85 - 3.00
powd. dms lb 2.50 - 2.65
Sulfathiazole-sodium, NF, dms ...lb. 2.75 - 2.90
Sulfur, coml., flour, bgs., mines, 100 lbs. 2.55 - —
bbls., mines 100 lbs. 3.30 - —
lump, bgs., mines 100 lbs. 2.45 - —
bbls., mines 100 lbs. 2.90 - —
crude, bulk, c.l., mines, contract, long-ton 26.50 - —
export, t.o.b vessels Gulf ports long-ton 28.00 - —
domestic and Canada, f.o.b vessel Gulf port long-ton 28.00 - —
refd., flowers, USP, bgs., mines 100 lbs. 4.25 - —
bbls., mines 100 lbs. 5.50 - —
flour, light, bgs., mines 100 lbs. 3.85 - —
bbls., mines 100 lbs. 4.75 - —
lump, bgs., mines 100 lbs. 3.55 - —
rolls, bgs., mines 100 lbs. 4.10 - —
bbls., mines 100 lbs. 4.65 - —
salt block, bbls., mines 100 lbs. 3.75 - —
virgin block, bbls., mines 100 lbs. 3.70 - —
rubbermakers, coml., reg. bgs., mines 100 lbs. 2.65 - —
bbls., mines 100 lbs. 3.80 - —
98-100% passing through 325 mesh, bgs., mines 100 lbs. 2.75 - —
bbls., mines 100 lbs. 3.90 - —
refd., bgs., mines 100 lbs. 3.50 - —
bbls., mines 100 lbs. 4.55 - —
treated 2.5% mineral oil, ogs., mines 100 lbs. 2.95 - —
bbls, mines 100 lbs. 4.10 - —
Dichloride, dms., c.l., works, frt. equald lb. .04 - —
l.c.l. same basis lb. .04¾ - —
tanks, same basis lb. .03¾ - —
Dioxide, liq., coml., cyls. works, frt. equald lb. .10 - .12
multi unit cars, works lb. .0535 - —
tanks, works lb. .045 - —
refrigeration, 150-lb cyls dlvd. lb. .30 —
Monochloride, 55-gal. dms., c.l., frt. equald lb. .04 - —
l.c.l. same basis lb. .04¾ - —
tanks, same basis lb. .03¾ - —
Sumac leaves, 28% tannin, bgs., ex-dock ton 130.00 - —
ground, bgs., ex-dock ...ton 130.00 - —
Superphosphate, run-of-pile under 22% a.p.a pulv., bulk, c.l., Balto. unit-ton. .88 - .91
Carteret N J unit-ton. .88 - .91
triple 48% or more a.p.a. pulv., bulk c.l. East Tampa, Fla. unit-ton .98 - —

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2,4,5-T. dms., c.l., works, frt. equald. lb. 1.18 - —
l.c.l., same basis lb 1.25 - —
Isopropyl ester, dms., c.l., works, frt. equald lb 1.24 - —
l.c.l., works lb 1.29 - —
Talc, dom. ord., Calif. grd. bgs., c.l., works ton 33.00 - 39.50
Vermont off color grd., bgs., c.l., works ton 19.40 - —
l.c.l., works ton 37.00 - —
fibrous, New York, grd., bgs., c.l., works ton 28.00 - —
l.c.l., works ton 31.00 - 36.00
99.5%, 325 mesh, bgs. c.l. works ton 31.00 - —
l.c.l., works ton 34.00 - —
99.95% micronized, bgs. works ton 36.00 - —
imp Canadian grd bgs., c.l., mines ton 20.00 - 35.00
Tallow, edible, tanks, dlvd ... lb. .14 - .14¼
inedible, fancy, bleachable, tanks, dlvd lb. .08 - —
guaranteed, dms., f.a.s. lb. .09½ - .09¾
No. 1, tanks, dlvd lb. .07 - —
prime, tanks, dlvd lb. .07¾ - —
special tanks, dlvd lb. .07¾ - —
sulfonated, 25%, bms. l.c.l lb. .08¾ - .09
50%, bbls., l.c.l lb. .09¾ - .10¼
Tankage, animal, feeding, 9-11% ammonia, bulk..unit-ton. 4.75 - —
Chicago, bulk....unit-ton. 5.50 - —
Tapioca flour Brazilian bgs. ex whse. lb. .10½ Nom.
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .47 - .49
l.c.l., same basis gal. .50 - .51
tanks, same basis gal. .39 - —
23-28%, dms., c.l., same basis. gal. .54 - .56
l.c.l., same basis gal. .57 - .58
tanks, same basis gal. .46 - —
50-53%, dms. c.l., same basis. gal. .70 - .72½
l.c.l., same basis gal. .73½ - .74½
tanks, same basis gal. .62½ - —
Coal (see Coaltar).
Tartar, emetic (see Antimony-potassium tartarate).
Terpine glycol ether, dms., c.l., works lb. .23½ - —
l.c.l. works lb. .25½ - —
tanks, works lb. .22 - —
Hydrate, NF, cryst., powd., 100-lb. fib. dms. lb. .70 - —
Terpinol, dms., l.c.l., dlvd E lb. .23¾ - —
extra, dms lb. .41 - .60
prime, dms lb. .30 - .45
Terpinyl acetate, extra, cns., dms. lb. .60 - .75
prime, dms lb. .55 - .70
Propionate, dms lb. 1.73 - 9.00
Terra alba (see Gypsum)
Testosterone, USP 100-gm. lots, bots gram. .70 - —
Propionate USP 100-gm. lots, bots gram. .68 - —
Tetrachloroethane, dms. works lb. .14½ - —
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Tetrachloroethylene, tech (see Perchloroethylene)
USP 55 gal dms., works ... lb. .20½ - .21½
smaller dms., works ... lb. .23½ - .25
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .61½ - —
l.c.l., dlvd. E lb. .62½ - —
Pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .49 - —
l.c.l., dlvd. E lb. .50 - —
tanks, dlvd. E lb. .47 - —
Tetrahydrofuran, dms., c.l., or t.l., works lb. .36½ - —
l.c.l., or t.t.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrapotassium phosphate (see Potassium phosphate).
Thallium metal, dlvd lb. 12.50 - 15.00
Sulfate 99% bots. dlvd lb. 8.00 - 13.00
Theobromine, NF, fib. dms. ...lb. 4.00 - —
And sodium acetate USP, fib. dms. lb. 4.45 - —
Sodio-Salicylate, NF, fib. dms. lb. 3.60 - —
Theophylline, anyhd or USP, 100-lb. dms lb 2.65 - —
Thiamine hydrochloride, USP regular, fib. dms kilo. 60.00 - —
ampule grade, fib. dms kilo. 62.00 - —
Mononitrate, USP, fib. dms kilo. 62.00 - —
Thiocarbanilide, dms, ton lots lb 72
less ton lots ... lb. .74 - —
Thiodiphenylamine (see Phenothiazine)
Thiourea, tech., bgs., t.l., frt. alld. lb. .33 - —
l.c.l., frt. alld ... lb. .35 - —
Thorium nitrate, purif., fib. dms., 100-lb. lots or more. works lb. 3.50 —
dl-Threonine bots., 1-kilo lots. kilo. 450.00 500.00
Thymol, fib. dms ... lb. 2.50 2.75
Iodide, NF, dms. ... lb. 7.30 —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhydrous).
crystals (see Stannous chloride, hydrous).
Oxide (see Stannic oxide).
Metal (straits) ... lb. 1.04⅜ —
Sulfate (see Stannous sulfate).
Tetrachloride anhyd. (see Stannic chloride, anhydrous)
Titanium dioxide anatase, chalk-resistant, bgs., c.l., dlvd lb. .24½ - —
l.c.l., dlvd. ... lb. .25½ - —
ceramic, bgs., c.l., dlvd... lb. .22½ - —
l.c.l., dlvd. ... lb. .23½ - —
reg., bgs., c.l., dlvd ... lb. .22½ - —
l.c.l., dlvd ... lb. .20½ - —
metallurgical, nat., gran., bgs., c.l., f.o.b. Jacksonville, Fla ton. 120.00 - —
Niagara Falls, N. Y., c.l., ton. 137.50 - —
5-ton lots ... ton. 142.50 - —
ton lots ... ton. 147.50 —
Titanium dioxide, rutile nonchalking., bgs., c.l., dlvd. E lb. .26½ - —
t.c.l. dlvd E lb. .27½ - —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Hydride, cns., works lb. 7.93 9.00
Pigment, calcium-rutile base, reg., bgs., c.l., dlvd ... lb. .09¼ - —
t.c.l., works ... lb. .09¾ - —
high-tinting, dms., c.l. lb. .09 - —
t.c.l. lb. .09½ - —
Tetrachloride, tech., dms., c.l., works lb. .40¾ - —
t.c.l., works lb 43¾ - —
tanks, works lb 39¾ - —
dl-a-Tocopherol, bots ... kilo. 134.20 - —
Acetate, bots ... kilo. 122.00 - —
25% dry, powd., bots ... kilo. 30.50 - 32.00
Acid succinate kilo. 165.00 —
o-Tolidine, base, paste, kgs., 100% basis lb. 1.35 - —
dry, kgs., 100% basis lb. 1.40 - —
Hydrochloride, paste, kgs., 100% basis lb. 1.35 - —
Tolu balsam, cns ... lb. 4.85 - —
Toluene (see Toluol).
p-Toluenesulfonamide, powd., dms., works lb. 70 - —
m-Toluidine, dms., c.l., works, frt. alld lb. 79 - —
t.c.l. same basis ... lb. 80 - —
tanks same basis ... lb. 78 - —
o-Toluidine, dms, c.l., works, frt. alld lb. 23 - —
t.c.l., same basis ... lb. 24 - —
tanks, same basis ... lb .22 - —
p-Toluidine, flake, dms., frt. alld lb. .64 - —
solid dms. frt. alld ... lb. .60 - .61
Toluol, coaltar, tndust. or nitration, tanks, works:—
Bethlehem, Pa ... gal. .32 - —
Birmingham dist ... gal. .32 - —
Chicago, dist ... gal. .32 - —
Cleveland dist ... gal. .32 - —
Geneva, Utah ... gal. .26 - —
Johnstown, Pa ... gal. .32 - —
Lackawanna, N. Y ... gal. .32 - —
Lone Star, Tex ... gal. .33 - —
Lorain Ohio ... gal. .32 - —
Middletown, Ohio ... gal. .33½ - —
Minnequa, Colo. ... gal. .32 - —
Philadelphia dist ... gal. .32 - —
Pittsburgh dist ... gal. .32 - —
Sparrows Point, Md ... gal. .32 - —
Terre Haute Ind ... gal. .35 - —
Youngstown Ohio ... gal .32 - —
Petroleum, indust., 2°, tanks, works:—Albany, N. Y ... gal. .33 - —
Bayonne, N. J ... gal. .34 - —
Baytown, Tex ... gal. .33 - —
Chicago, Ill. ... gal. .35 - —
Detroit, Mich ... gal 35 - —
Houston, Tex ... gal. .33 - —
Philadelphia, Pa ... gal. .34 - —
Providence R I ... gal. .35 - —
Wood River, Ill ... gal. .34 - —
2,4-Tolylenediamine cryst., fib. dms., c.l., frt. alld lb. .97 - —
l.c.l., frt. alld ... lb. 1.00 - —
powd., fib. dms., same basis lb 1.08 —
Tonka beans, Angostura, cks. ...lb. No prices.
Brazilian, Surinam, cs ... lb. 1.35 - —
Totaquine 100-oz. lots, cns ... oz. .42 —

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both aqueous & anhydrous

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Phoenix, Ariz. ... 24 Bank of Douglas Bldg.
Pittsburgh 19, Pa. ... 1715 Grant Bldg.
Portland, Oregon ... 3950 Northwest Yeon
St. Louis 7, Mo. ... 112 West Ferry Street
Salt Lake City, Utah ... 650 West 8th South
San Francisco 19, Calif. ... 1400 16th Street
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Du Pont amines meet the highest requirements set by industry.

Low molecular weight—plus low cost—makes them ideal for a variety of organic reactions in the preparation of dyes, rubber chemicals, pharmaceuticals, fungicides, herbicides, and other products.

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DU PONT
REG. U. S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING
. . . THROUGH CHEMISTRY

Toxaphene—Wax, Carnauba

Toxaphene, dms., c.l., t.l., works, lb. .21 • —
l.c.l., l.t.l., works lb. .27 • —
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .39 • —
l.c.l., same basis lb. .40 • —
tanks, same basis lb. .37 • —
Tributyl citrate tech., non-ref., dms., c.l., frt. alld. E. of Denver lb. .42½ • —
l.c.l., frt. alld E of Denver, lb. .43½ • —
tanks, frt. alld E. of Denver, lb. .40 • —
Phosphate, dms., c.l., works lb. .52½ • —
l.c.l., same basis lb. .53½ • —
tanks same basis lb. .50 • —
Tributylamine, dms., c.l., works lb. .67½ • —
l.c.l., same basis lb. .68½ • —
tanks, same basis lb. .65 • —
Trichlorobenzene, dms., c.l., frt. alld. E lb. .14½ • —
l.c.l. frt alld E lb. .15½ • —
tanks, frt alld E lb. .13 — —
Trichlorobenzene prices in the West 1¾c. higher.
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .12½ • —
l.c.l., dlvd. E. lb. .14½ • —
tanks, works, frt. equald lb. .11¼ • —
1,1,1-Trichloroethane, dms., c.l., works lb. .13½ • —
l.c.l., works lb. .14¼ • .16¼
tanks, works lb. .11½ • .12½
Tricholine citrate, 65% soln., ref. cbys., works, frt adjusted lb. 1.40 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd. lb. .37 • —
l.c.l., dlvd. lb. .38 • —
tanks, dlvd. lb. .34½ • —
petroleum, dms., c.l., dlvd. lb. .36½ • —
l.c.l., dlvd. lb. .37½ • —
tanks, dlvd. lb. .34½ • —
Triethanolamine, dms., c.l., dlvd. E lb. .24½ • —
l.c.l., same basis lb. .25¼ • —
tanks, same basis lb. .22 • —
Triethylamine, dms., c.l., works, dlvd E lb. .49 • —
tanks, same basis lb. .46½ • —
Triethyl citrate, refd., tech., non-ref. dms. c.l., frt. alld E. of Denver lb. .45¾ • —
l.c.l. frt. alld E. of Denver, lb. .46¾ • —
tanks frt. alld. E. of Denver, lb. .43¾ • —
Phosphate, dms., c.l., dlvd. lb. .40½ • —
l.c.l., dlvd lb. .41¼ • —
tanks, dlvd. lb. .38 • —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 • —
l.c.l., dlvd., E. lb. .22 • —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½ • —
l.c.l., dlvd. E. lb. .52½ • —
tanks, dlvd. E. lb. .49 • —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼ • —
l.c.l., dlvd. E. lb. .24¼ • —
tanks, dlvd. E. lb. .20¾ • —
Trimethylamine 25-40% soln., dms., c.l., works, frt. equald., 100% basis lb. .42 • —
l.c.l., works, frt. equald, 100% basis lb. .42½ • —
tanks, works, frt. equald, 100% basis lb. .33 • —
Trioxane, pure, dms., c.l., t.l., works lb. .50 • —
l.c.l., works lb. .51½ • —
Tripentaerythritol, bgs., l.c.l., works, lb. .35 • —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .40 • —
l.c.l., frt. equald lb. .41 • —
Triphenylguanidine, bbls., works lb. .90 • —
tanks, same basis lb. .18½ • —
Tripropylene glycol, dms., c.l., frt. alld E lb. .20½ • —
l.c.l., frt. alld. E lb. .21½ • —
Tripopylene glycol prices 1c. per lb. higher in West.
Phosphate (see Sodium phosphate tribasic).
Tyrothricin, USP, bots gram .75 • .85
dl-Tryptophane, fib. ctns., works, kilo.165.00 • —
Tungsten metal powd., 2-5 microns, dms., works lb. 4.20 • —
Turpentine, gum (see Protective Coatings market, Naval Stores).

U

Unicorn root, false (see Helonias root).
True (see Aletris root)
Urea, 46% N. indust., bgs., c.l., t.l., dlvd. E ton.120.00 • —
l.c.l. dlvd E, ex whse ton.140.00 • —
45% N. agricultural, bgs., c.l., (30 tons), dlvd. E ton.105.00 • —
Urea-ammonia liquor, A and B grades N basis, tankcars, Belle, W Va ton.126.00 • —
C grade, tankcars, same basis.ton.124.50 • —
37 grade, tankcars, same basis. ton.153.00 • —
Urethane, USP, dms. lb. 1.45 • —
Uva-ursi leaves, bls. lb. 12 • .14

V

Valerian root, Belgian, bgs. lb .35 • —
Indian, bgs. lb. .27 • —
dl-Valine, dms., works lb.21.00 -27.50
Valonia beards, 40-42% tannin, bgs., ex dock ton.86.00 • —
cups, 28-30% tannin bgs., ex dock ton.64.00 • —
extract, powd., 63% tannin, bgs., exdock, duty extra lb. .09¾ • —
Vanadium pentoxide tech., dms., works lb. 1.28 1.33
Vanilla beans, Bourbon, tins lb. 7.50 • —
Mexican, cuts, tins lb. 7.50 • —
whole, tins lb. 8.00 • —
Tahiti, cs lb 7.00 — —
Vanillin ex eugenol, tins 25-lb lots lb 6.50 6.75
smaller lots lb 6.90 7.25
ex lignin, dms., 100-lb. lots lb. 2.75 — —
smaller lots lb 2.80 2.85
Vinyl acetate monomer 55-gal dms., c.l., works lb. .19 • —
l.c.l., works lb. .20 • —
tankcars, works lb. .16½ • —
tanktrucks less than 4,000 gal., works lb. .17½ • —
n-Butyl ether tech. dms., c.l., works lb. .28 • —
l.c.l., works lb. .30 • —
tanks, works lb. .27 • —
Chloride monomer tanks, works lb 11 • .12
Ether, USP, anesthesia, bots., 50 c.c., hospitals bot. 1.12 • —
75 c.c. bot 1.56 • —
tech., dms., c.l., works lb .26 • —
l.c.l. works lb. .23 • —
tanks, works lb. .25 • —
Isobutyl ether, tech., dms., c.l., works lb .28 • —
l.c.l. works lb .30 • —
tanks works lb .27 • —
Methyl ether, cyls., works lb. .23 • —
tanks works lb .20 — —
Cylinders are sold outright, or if shipped against deposit, a free period of 60 days is allowed; and if empties are returned prepaid and in good condition within that period full refund is made
Propionate monomer, dms., c.l., dlvd lb .49 • —
l.c.l. same basis lb. .50 • —
tanks, same basis lb. .47 • —
Tricaloride (see Trichloroethane)
2-Vinylpyridine 10 dms to tanks, works lb 1.36 • —
1 to 9 dms., works lb. 1.50 • —
tanks, works lb 1.33 • —
Vinyltoluene, dms., c.l., frt. alld lb. .18½ • —
l.c.l., frt. alld. lb. .19½ • —
tanks, frt alld lb. .16 • —
Viosterol in nat. vegetable oil, 400,000 to 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units, .02½ • .04¾
Vitamin A acetate, syn. crystalline beads 500,000 A units per gram gram .07¼ • —
dry 500,000 units per gram, kilo lots kilo.67.50 • —
325,000 units per gram same basis kilo.43.88 • —
250,000 units per gram, same basis kilo.33.75 —
Dry vitamin A acetate in less than kilo lots $2.50 per kilo higher in all potencies
liq., in oil, 1,000,000 A units per gram 1,000,000 units. .10 • —
Palmitate liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .10 • —
in oil, 1,000,000 A units per gram 1,000,000 units. .10 • —
B_1 (see Thiamine hydrochloride).
B_2 (see Riboflavin)
B_{12} complex natural (see Rice bran concentrate and Yeast)
B_{12} crystalline, 1-gram or 5-gram vials gram.245.00 • —
oral grade solids, in containers of 1 and 5 grams of B_{12} activity gram.185.00 • —
C (see Acid, ascorbic)
D (see Oils, codliver and fish-liver Calciferol, and Viosterol)
D_2 dry 850,000 units per gram, kilo lots kilo.42.50 • —
less than kilo lots kilo.45.00 • —
E (see a-Tocopherol and Oil, wheat germ).
G (see Riboflavin)
H (see Biotin)
K Active (see Menadione).
K_1, 25 gram bots gram 4.50 — —
Violet methyl toner (see Blue methylviolet toner)
V.M.&P. naphtha (see Petroleum naphtha).

W

Wahoo root, bark, bls. lb. 2.25 • —
dlvd lb. 1.95 • —
23-49-lb. lots, N. Y. or Chicago. lb. 2.05 • —
5-24-lb. lots, cns., N. Y. or Chicago lb 2.15 • —
Wattle bark, fair average, African bls., ex dock ton.95.00 -96.00
merchantable, bls., ex dock ton.91.00 -92.00
Extract, liq., 35% tannin, bbls., lb. .08¼ .08⅝
solid, E. Africa, 60% tannin, bgs., ex dock, duty extra lb. .09⅞ • —
S. Africa, 60% tannin, bgs., ex dock duty extra lb. .10 • —
Warfarin 0.5% dms. 50-lb. lots,
Wax, amorph. (see Wax micro crystalline)
Bayberry, bgs lb. .45 • .47
Bees, crude, African, bgs. lb. .71 Nom.
Brazilian, bgs lb. .73 Nom.
Central American, bgs. lb. .68 Nom.
Chilean, bgs. lb. .73 Nom.
refd., USP, bleached, white bricks, 100-lb. ctns lb. .80 • .82
slabs, 100-lb. ctns lb. .79 • .81
yellow, bricks, 100-lbs. ctns. lb. .71 • .73
slabs, 100-lb. ctns. lb. .70 • .72
Candelilla, crude, bgs. lb. .70 • .71
refd., bgs. lb. .73 • .74
Powdered candelilla: 20 to 100 mesh, 7c. higher.
Carnauba, chalky, bgs., ton lots, lots lb. .65 • .66
North country No. 2, crude, bgs., ton lots lb. .74 Nom.
No. 3, Ceara, crude, bgs., ton lots lb. .66 • .68
refd., pure, bgs., ton lots lb. .74 • .75
tech., bgs., ton lots lb. .69 • .71
Parnahyba, crude, bgs., ton lots lb. .68 • .69
refd., pure, bgs., ton lots lb. .76 • .78

QUALITY control measures that end at your plant door aren't enough. Your product can become seriously contaminated if shipped in containers that aren't specially treated to maintain your product's purity.

Contaminated products are great "customer-losers." Yet, contamination-en-route can be avoided by shipping in USS Steel Drums. That's because every USS Steel Drum goes through several special steps to make all surfaces spotlessly clean and free of scale. Once inner and outer surfaces are prepared, they are thoroughly coated with a special phosphate solution that assures long-term freedom from rust. This combination of immaculate steel surfaces and special phosphate-coating protection means that your product will arrive at your customer's door as pure as the moment it left your plant —when you ship in USS Steel Drums.

Product-protecting USS Steel Drums are available in sizes from 2½ to 110 gallons, either plain or decorated. To meet special needs, we have a wide variety of custom fittings and openings.

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USS STEEL DRUMS
"It's Better to Ship in Steel"
UNITED STATES STEEL

Wax, carnauba, yellow No. 1, Ceara, bgs., ton lots	lb.	1.43	1.45
Parnahyba, bgs., ton lots	lb.	1.46	1.48
Powdered carnauba wax price differentials same as powdered candelilla.			
Japan, cs.	lb.	.47	.49
Microcrystalline, coating grades, tankcars, works	lb.	.10	.11
laminating grades, tankcars, works	lb.	.11	.12
Montan, dom., refd., bgs	lb.	.29	.30
imp., crude, Bohemian, bgs.	lb.	.26	.28
German, bgs.	lb.	.35	Nom.
Ouricury, refd., pure, bgs.	lb.	.89	.90
tech., bgs	lb.	.85	Nom.
Paraffin (see P)			
Spermaceti, blocks, cs.	lb.	.30	.33
cakes cs	lb.	.31	.34
Sugar cane, dom., refd., slabs, 80 lbs. ctns., works	lb.	.65	.75
spot	lb.	.67½	.72½
White lead (see Lead, White).			
White pine bark, rossed, bls	lb.	.18	.19
White precipitate, USP powd. dms.,	lb.	6.55	—
Whiting (see Calcium carbonate).			
Wild cherry bark, thin, nat., bls	lb.	.20	—
rossed, bls	lb.	.21	—
Witch hazel, bark, bls.	lb.	.16	.17
leaves, bls	lb.	.27	—
Wollastonite fine bgs., c.l., works	ton	39.59	—
t.c.l., ex whse	ton	56.00	—
medium, bgs., c.l., works	ton	27.00	—
t.c.l., ex whse	ton	44.00	—
Woolfat, crude (see Degras).			
USP (see Lanolin)			
Wormseed, American bgs.	lb.	.20	.25
Levant, bgs	lb.	4.25	4.50
45°-47°C. dms., c.l., same basis,			

X

Xylene (see Xylol)			
Xylenol cryst., 58°-60°C., m.p., dms., c.l., works	lb.	.40	—
56°-58°C., dms., t.c.l., works, frt. equald	lb.	.30	—
	lb.	.212	—
t.c.l. same basis	lb.	.215	—
tanks, same basis	lb.	.199	—
fraction, b.r., 7°-9°C., dry above 227°C. dms., c.l., same basis	gal.	.96	—
t.c.l. same basis	gal.	.99	—
tanks, same basis	gal.	.85	—
dry at or below 227°C., dms., c.l., same basis	gal.	1.11	—
t.c.l. same basis	gal.	1.14	—
tanks, same basis	gal.	1.00	—
Xylidines, mixed, o-m-p, dms., c.l. or t.l., works	lb.	.39	—
t.c.l. same basis	lb.	40	—
tanks, same basis	lb.	.38	—
Xylol, coaltar, indust., tanks, works:—			
Bethlehem, Pa.	gal.	.34	—
Birmingham dist.	gal.	.32	—
Chicago dist.	gal.	.35	—
Cleveland dist.	gal.	.34½	—
Geneva, Utah	gal.	.29	—
Johnstown, Pa.	gal.	.33	—
Lackawanna, N. Y.	gal.	.35	—
Lone Star, Tex.	gal.	.33	—
Lorain, Ohio	gal.	.33	—
Middletown, Ohio	gal.	.34	—
Minnequa, Colo.	gal.	.34	—
Philadelphia dist.	gal.	.34	—
Pittsburgh dist.	gal.	.32	—
Sparrows Point, Md.	gal.	.34	—
Terre Haute, Ind.	gal.	.35	—
Youngstown, Ohio	gal.	.32½	—
petroleum, indust., tanks, works:—			
Bayonne, N. J.	gal.	.34	—
Baytown, Tex.	gal.	.33	—
Chicago, Ill.	gal.	.35	—
Houston, Tex.	gal.	.33	—
Philadelphia, Pa.	gal.	.34	—
Providence, R. I.	gal.	.35	—
Wood River, Ill.	gal.	.35	—

Yara, yara, cns.	lb.	2.15	2.65
Yeast, brewer's, dry, USP, 50 int'l B units per gram, 100-lb. dms	lb.	.47	—
90 int'l B units per gram, 100-lb. dms	lb.	.52	—
200 int'l B units per gram, 100-lb. dms	lb.	.56	—
300 int'l B units per gram, 100-lb. dms	lb.	.60	—
debittered, USP, Saccharomyces, dlvd	lb.	.27	—
Torula, USP, dlvd	lb.	.18	—
Yellow, barium chromate, CP, bbls., dlvd. N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul	lb.	.35	—
Yellow barium chromate price differentials in other States and city zones are those for chrome yellow below			
Benzidine, AAA, bbls., dlvd	lb.	2.10	—
AAOT, bbls., dlvd	lb	2.85	—
Lightfast, bbls., dlvd	lb	3.15	—
Cadmium, CP, all shades, bbls., frt. alld E. of Rockies	lb.	2.85	—
Selenide (lithopone, all shades, bbls., frt. alld E. of Rockies	lb.	1.05	—
Cadmium yellows, Los Angeles and San Francisco ex whse 1c per lb higher			
Chrome, CP, bbls., dlvd. N. of Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island	lb.	.33½	.35
Dlvd. Ala., Fla., Ga., La. (Shreveport 1½ higher); Miss., N. C., S. C., Penna., Dallas, Tex., 1½c higher; Ft. Worth, Tex., 1½c higher; El Paso, Tex., 2c higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c higher; dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago			
Hansa, 10 g., bbls., same basis as yellow, chrome	lb.	2.25	—
G pigment, bbls.	lb	1.91	—
Iron oxide, natural, French type, bgs., c.l., works	lb	.06	—
Peruvian type, bgs., t.c.l.	lb	.0205	.0345
pure, bgs., c.l., works	lb	11½	—
t.c.l., works	lb	11¾	—
Mercury, oxide, bbls., 1,000-lb. lots,	lb.	5.56	—
smaller lots	lb	5.60	—
Ocher (see Yellow, iron oxide, natural)			
Zinc (chromate), bbls., dlvd	lb	.27	.27½
basic, bbls., dlvd	lb.	.31	.32½
Yerba santa, leaves, bls.	lb.	.40	.42
Yohimbine hydrochloride, bots., tins,	oz.	3.75	4.25

Z

Zein, bgs., 36,000-lb. lots or more	lb	.38	—
1,000 to 36,000 lb. lots, works	lb	.40	—
smaller lots, works	lb	.43	—
Zinc acetate, NF, VIII, dms.	lb	.53	—
tech., dms., works	lb.	.29½	.29¾
Borate, bgs., c.l., dlvd E	lb	.192	—
t.c.l., dlvd E	lb	.202	—
Zinc chloride, NF, gran., dms.	lb.	.42	—
precip., powd., dms.	lb.	.26	—
soln., 50% dms., c.l., works, 100 lbs.		5.80	—
t.c.l., works, 100 lbs.		6.40	—
tanks, works, 100 lbs.		5.15	—
tech., fused, dms., c.l., works, 100 lbs.		10.70	—
t.c.l., works, 100 lbs.		11.20	—
gran., fib., dms., c.l., works, 100 lbs.		11.45	—
t.c.l., works, 100 lbs.		11.95	—
Chromate (see Yellow, zinc).			
Cyanide, kgs., 1,000-lb. lots or more, works	lb.	.523	—
smaller lots, works	lb.	.543	—
Dust, pigment, bbls., c.l., works	lb.	.17½	—
t.c.l., works	lb.	.18½	—
Fluoride, bbls., works	lb.	.49	.50
Hydrosulfite, dms., c.l., frt. alld	lb.	.21½	—
t.c.l., frt. alld	lb	.22	.37½
Metal, prime western slabs, E. St. Louis	lb.	.13½	—
New York	lb.	.14	—
Naphthenate, liq., 8% Zn., dms., frt. Alld.	lb.	.24½	—
10% Zn. dms. frt. alld.	lb.	.30	—
Nitrate, tech., cryst., bbls., works,	lb	.20	—
Oxide pigment, American process, lead-free, bgs., c.l., frt. alld	lb.	.14½	—
t.c.l. same basis	lb.	.15½	—
leaded, 35%, bgs., c.l., mills, frt. alld	lb.	.15½	—
t.c.l., same basis	lb.	.16½	—
50%, bgs., c.l., same basis	lb.	.15⅞	—
t.c.l., same basis	lb.	.16⅞	—
French process, coml., green seal, bgs., c.l., frt. alld	lb.	.15¾	—
t.c.l., same basis	lb.	.16¾	—
red seal, bgs., c.l., same basis	lb.	.15¼	—
t.c.l., same basis	lb.	.16¼	—
Zinc oxide pigment, French process, coml., white seal, bgs., c.l., same basis	lb.	.16¼	—
t.c.l., same basis	lb.	.17¼	—
USP, ctns., c.l., frt. alld	lb.	.17¼	—
t.c.l., same basis	lb	.18¼	—
Zinc oxide Pac. coast prices 1c. higher.			
Phenolsulfonate, NF, gran., dms.,	lb.	.39	—
powd. dms	lb.	.42	.49
Zinc resinate, precip., 7.2-7.6% Zn., dms., frt. alld	lb.	.29	—
Silicofluoride, dms., works	lb.	.12½	.14
Stearate, tech., USP, ctns., c.l	lb.	.39	—
	lb.	.39	—
t.c.l.	lb.	.40	.44
Sulfate, powd., monohydrate, 36% Zn, bgs., c.l. dlvd E	100 lbs.	8.75	—
t.c.l., dlvd E	100 lbs.	9.75	—
Zinc sulfate in bbls. 40c. higher			
USP, gran., dms	lb	.28	—
Sulfide, pure, bgs., c.l., dlvd	lb.	.2530	—
Undecylenate, dms	lb	2.25	2.50
Yellow (see Yellow, zinc)			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	—
bbls., c.l., works	100 lbs.	10.85	—
t.c.l., works	100 lbs.	11.35	—
Zinc-formaldehyde sulfoxylate, basic, dms., c.l	lb.	.25½	—
t.c.l.	lb.	.26	—
Zircon (G), gran., bgs., c.l., works,	lb.	.03¼	—
5 tons to c.l., works	lb.	.03⅜	—
1 ton to 9,999-lb. lots, works,	lb.	.04	—
smaller lots, works	lb.	.06½	—
Zircon (G), milled, bgs., c.l., works,	lb.	.04⅛	—
5 tons to c.l., works	lb.	.04⅜	—
1 ton to 9,999-lb. lots, works,	lb.	.04⅝	—
500-1,999-lb. lots, works	lb.	.07½	—
Zircon (G) in barrels, 1c. higher			
Zirconium acetate, 13% com., ZrO., c.l., 30,000 lbs. minimum, works	lb	.23	—
Hydride, cns., works	lb.	7.00	8.45
Nitrate, dms., ex whse	lb.	4.30	7.00
Oxide, 92½-99%, white grd., bbls. or bgs., works	lb	1.50	—
lump, electric-fused, bgs., lump, electric-fused, bgs., c.l., works	lb.	.44	—
5-ton lots, works	lb	44½	—
1 ton to 9,999-lb. lots, lbs., works	lb	.45	—
CP, white grd., bbls., or bgs., works	lb.	1.50	—
lump, electric fused, bags, 500 to 1,999-lb. lots, works	lb	45½	—
smaller lots, works.	lb	.48	—
milled, electric-fused, bgs., c.l., works	lb	.59	—
5-ton lots, works	lb.	59½	—
1 ton to 9,999-lb. lots, works	lb.	.60	—
500 to 1,999-lb. lots, works	lb	60½	—
smaller lots, works.	lb	.63	—
Oxychloride, cryst., ctns., 5-ton lots, works	lb	35½	—

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Volume 170 **December 17, 1956** **No. 25**

Drug Standards in Foreign Relations

No doubt there has been in the controversial situation with respect of the General Services Administration-International Cooperation Administration policy on the purchase of drugs and pharmaceuticals in the foreign aid program a goodly measure of encouragement for those who go along with the "antitrust"-law administrative theory that standards interfere restrictively with competition. The anti-standardists cannot be expected to share the gratification of the drug industry of this country over the modification of the policy by ICA which requires that all USP articles supplied comply fully with the relevant standards of that official compendium. Will it, however, be possible for them—and more or less unstandardized competitive suppliers—to find a big loophole in the new requirement? To what extent are USP articles specified in the drug purchasing program?

Behind that question are the real big ones: Are those (medical practitioners and others) who will be required to make use of the medicinal agents provided under the program sufficiently familiar with USP requirements to know what they mean in terms of local customs? To what extent can they be expected (in Vietnam, for example) to accept USP standards? Are those standards in conflict with domestic requirements? Is it not to be expected that those who are competitively eliminated by insistence upon USP standards will apply to propaganda, persuasion, and perhaps even pressure against the acceptance of USP supplies?

More or less closely in the background looms up the proposal that international standards for drugs be set up by way of the United Nations. There is much to be said in behalf of such a system of standardization. More than a little can justifiably be said against it. As it is with respect of the setting up of a UN global peace force, the job of getting agreement upon a fully satisfactory and effective global system of standards would be practicably impossible. Manufacturers of drugs or any other standardized products interested in foreign markets have learned much—and still have more than a little to learn—about the attitude of foreign buyers toward "imported" standards. Experiences under the US pure food and drug law have made that plain.

Drug standards are, in a way, largely in a class by themselves among systems of standardization. But, the problems which they present are not all wholly apart from those dealt with in a recently issued policy statement by an export advisory panel set up two years ago by the British Standards Institution in connection with the relation of BSI work to export trade. The basic recommendations of the panel, headed by an executive in the chemical industry, are that British industry take a more active interest in the work of the International Organization for Standardization and that, in the preparation of standards, it take a more realistic view of the needs and desires of overseas markets. "British standards," it says, "cannot be expected to be accepted abroad merely for traditional reasons, but a well conceived and widely accepted British standard can have a great influence on international recommendations."

Finding Places for the Displaced

Will business, or must government, provide the effective solution of the problem of finding suitable places in the population of this country for the something like 20,000 refugees coming here from Hungary? The federal government is paying for the transportation of the refugees from Austria to New Jersey. When they reach that destination, their disposition goes into the hands of half a dozen federal agencies, and there is a still sketchy program for cooperation, coordination, and collaboration on the part of a number of religious, charitable, and other welfare groups for getting the immigrants settled. There is reason to feel that the federal government will have to contribute substantially toward the carrying out of that program. Governments at lower levels may have ideas but no funds.

One of the biggest jobs in the attempting to solve the problem of refugee absorption is the screening of the arrivals on a satisfactory basis of individual qualifications. Early surveys in that connection found a range that was quite broad in scope and had all the customary degrees of development. That is one of the reasons why the Commissioner of Immigration, in Washington, has asked that he be furnished information on the nature, as well as the number, of jobs which somewhere may be available. It could help more than a little if business organizations throughout the country were supplied with adequate information on the qualifications available.

The placing of the refugees in constructive or productive or otherwise helpful positions would well be given appropriate consideration by business organizations and those concerned with domestic services at all levels. It is to be expected that the calls for specially and well qualified workers will far outnumber those for the less skilled. Some pertinent data in that respect were developed recently in a survey by the Philadelphia Chamber of Commerce, especially on the point that, although many more jobs were now available than there were in 1954, there had been a steady increase in the number of persons on relief—not because it had become easier to get relief, but because the demand for workers had become more selective—employers wanted to get something like their money's worth under the higher wage scales—and was not being fully met.

There have been suggestions that the best areas in which to locate the refugees are the agricultural ones. There appears to be far from enough justification for that belief. It remains to be seen whether there are many, if any, agricultural workers among the arrivals; most of them assumably will have come out of cities. There also is a question whether agriculture in this country can see any reason for changing its policy which has sent a large proportion of its family manpower into the automotive and other manufacturing industries and places dependence largely upon a relatively quite small number of mechanically trained workers.

Theoretically, there should be little difficulty in having one more person absorbed in each 8,000 of the present population. But, it will take some real understanding, provided with adequate relevant data, to avoid the not uncommon eventuality of displaced persons becoming misplaced persons.

Growing Interest in World Trade

Promotion of world trade is getting more and more attention in both government and business circles in this country. The President has a new program in the making. The Secretary of Commerce has made a strong, logical presentation of a plea for a modified, moderated program in reciprocal trade agreements. There is a spreading expression of business views that the United States must cultivate the poor nations of the world or see them go under a communistic commercial-political protectorate.

In the more analytical areas of economic thinking, there is a growing belief that the United States will have to get into some sort of commercial partnership with the proposed limited free trade lineup of six nations of Western Europe. Behind that belief, however, is more than a little fear that this country will have to foot the bill for preserving Western Europe economically, far beyond the cost of the keeping of its oil tanks filled.

There is an increasing display of evidence that even business in this country is beginning to recognize the fact that it would cost the people of the United States—which really does include business—much less to provide economic help, even salvation, for Western Europe as a customer for what it may have to sell than it would to pour government money into that region—and let other peoples get the goods which that donating made it possible to produce.

So, there is more optimism in the direction of expectations, and hopes, that it will pay Western European business to do twice as much showing of its wares in trade fairs in this country as United States business does in those abroad. Those thinkers also feel that the participation of this country's business in fairs abroad should be more that of a buyer than that of a seller. They see little, if any, good in the political participation of this country in those fairs, which they look upon as an unwelcome endeavor to "sell" American ways of living to peoples who do not want them but are quite willing to be paid for putting up with the sales efforts. It takes a peculiarly directed sort of optimism to see what good for this country or its people can be got out of such participation proposed with reference to a fair in Poland, whatever may be the status of that country by the time that—if ever—the fair is opened. They have doubts that any sort of selling participation under the invitation to business for the fair in Baghdad next April would pay. But, they do feel that Iraq is a good country in which to do more American buying.

Whatever may be the desirability, or necessity, of promotion by this country of trade with any part of Europe or Asia, there is a bigger opportunity—and a big actual need—for such an undertaking in North and South America.

Washington Talks It Over

Government Seeking Stronger Ammunition to Use Against Rising Trend Toward Corporate Mergers.

By Ralph L. Cherry
Chief, OPD Washington Bureau

The continued trend towards corporate mergers still concerns government officials. Estimates being made by the Federal Trade Commission that the number this year may match last year's quarter-century high of 846 is stirring up renewed demands for new curbs and marks the opening gun in a new effort to get congress to do something about it.

At least three major changes in the laws are to be proposed by the Justice department with the support of the White House, while FTC is expected to ask congress for another boost in its anti-monopoly funds.

Congress studied antitrust law changes all last session without taking any final action except to increase enforcement moneys.

The three changes scheduled from the Justice department are (1) a pre-merger notification law; (2) FTC supervision over bank mergers that take place when one bank acquires the assets of a competitor, and (3) a law giving the Attorney General power to demand the production of books and records in investigations conducted prior to filing complaints in civil antitrust cases.

Plans are to start the ball rolling in the house where chairman Emanuel Celler of New York of the judiciary committee has announced that he hopes to get at least one of the three proposals out of committee and on the house floor early in February.

The action will come first on either the pre-merger notification bill or the bank merger bill. The third proposal will encounter very stiff opposition in both houses.

Labor Gets Wage Authority

If it should become necessary for the United States to mobilize on a war footing or national emergency basis, look to the Department of Labor for policy as respects a wage and salary stabilization program. Responsibility for development of such a program has just been delegated to the Secretary of Labor by the Office of Defense Mobilization director Arthur Flemming.

The Labor secretary also has been given the responsibility for development of preparedness measures relating to the expansion of the labor force, to improving its skills, and to the distribution, utilization and compensation of the civilian workers. In connection with these responsibilities, the secretary has been granted the specific right to recommend adjustments in production, procurement and other government programs needed in the interests of effective utilization of the nation's manpower resources.

The specific stabilization preparedness measures for which the Labor secretary is to be responsible include development of the wage stabilization program itself, development of measures for its administration, measures for investigation and enforcement, and development of plans for gathering and disseminating wage, price, and other economic data for policy decisions and operating needs during the emergency.

Success of Collective Bargaining

Out of 854 major collective bargaining situations in which wages were an issue during the first nine months of this year, increases were negotiated in all but 1 percent of the number.

And the increases tended to be larger than during the similar period of 1955, although the number of situations were fewer—largely because of many long-term agreements negotiated in 1955.

Increases of 9 cents or more were provided in settlements affecting three out of four workers covered by the summary prepared by the Bureau of Labor Statistics, whereas last year only two out of every four workers got as much as 9 cents more.

The summary showed a marked concentration of increases occurring in the bracket between 10 and 11 cents; settlements providing average increases of this size covered three out of 10 employees.

Wage increases were not the only important results of collective bargaining this year. Over three out of every four agreements liberalized one or more supplementary benefits. These showed up in broader health and welfare benefits, liberalized vacations, and more paid holidays.

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Heavy Chemicals

Quotations on African manganese dioxide skyrocketed last week, owing chiefly to the lack of shipping space brought about by the Suez crisis. Other factors in the increase included strong domestic demand and scarcity of good ore. On the other hand, cobalt metal was weaker in this country, in line with a softer market in Europe and Africa. Prices on white arsenic will be changed from a delivered basis to a works basis, effective January 1.

Phosphorus pentoxide was added to the growing list of chemicals to be advanced in price January 1. One producer announced an advance of 45 cents, while another announced an advance of $1 per hundred pounds.

Harbinger of a firmer southwestern market for hydrochloric acid came with announcement by one firm of increased delivered and f.o.b. prices out of Texas. The market in the New York area continued subject to shading, however.

Preliminary figures compiled by the Census bureau for production of ten selected chemicals in October shows increases ranging from 4 percent to 16 percent. The only decrease noted was lime-soda caustic production, which declined 2 percent.

Calcium carbide led the way with a 16 percent increase over September levels. Phosphoric acid was up 11 percent. Sulfuric acid increased 9 percent, and hydrochloric, 8 percent.

The American Pulp and Paper Association reported production for the week ended December 8 at 98.3 percent of theoretical capacity, as compared with the revised figure of 97.8 percent for the previous week, and 103.1 percent for the corresponding week of last year.

January 1 Price Advances

Acid, boric, cryst., gran., powd., $2.25 per cwt.
Borax, anhyd., cryst., $2.50 per cwt.
gran., decahydrate, $1.25 per cwt.
Pentahydrate, $2 per cwt.
powd., $1.75 per cwt.
Calcium phosphate, monobasic, 30c. per cwt.
tribasic, 50c. per cwt.
Phosphorus pentoxide, 45c. to $1 per cwt.
Potassium pentaborate, $2.50 per cwt.
Nitrate, NF, gran., 25c. per cwt.
powd., 25c. per cwt.
Sodium cyanide, flake, 1½c. per lb.
Metaborate, $2 per ton.
Phosphate, dibasic, duohyrate, 25c. per cwt.
Silicate, 40° Be, 10c. per cwt.
47° Be, 15c. per cwt.
52° Be, 20c. per cwt.
solid, $3 per ton.
Sulfite, anhyd., 25c. per cwt.

Price Trends

Advanced
Manganese dioxide, African, $39.50 per ton.

Reduced
Cobalt metal, 25c. per lb.
Potassium stannate, 1.5c. per lb.
Sodium stannate, 1.8c. per lb.
Stannic chloride, 1.8c. per lb.
Stannous chloride, anhyd., 2.4c. per lb.
hydrous, cryst., 2c. per lb.
Sulfate, 2.1c. per lb.
Tin, 4⅝c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 16, 1955
103.35	102.36	102.34	101.26

For Current Prices see Page 9

Acid, Boric—Prices for all grades but anhydrous are slated for an increase of $2.25 per hundred pounds, effective January 1 on spot and contract.

Acid, Hydrochloric—The first glimmering of a firmer market in the southwest in some time occurred last week when one producer announced increases of $2 per ton for delivered acid from a Texas shipping point, effective January 1.

This would bring the price of delivered acid in tankcars and tank trucks up from $23 to $25 per ton. Muriatic acid f.o.b. works was increased from $19.69 to $21 per ton.

Other producers of hydrochloric acid in the area were as yet uncertain as to whether they would go along with the increases, but it was generally felt that the announcement would have a firming effect on the market in an area where acid has been plentiful, and prices weak, for several years.

Eastern market sources believed that the announced increase in the southwest would have little or not effect on prices in the northeastern and midwestern sections of the country.

It was pointed out that competition has been particularly keen in the New York area, and that list prices for 20 degree acid could be shaded.

In other northeast and midwest areas, however, quotations are regarded as steady, particularly in some steel-producing locales where demand is strong.

Acid, Nitric—Demand from the steel industry continued strong and active. Preliminary figures compiled by the Bureau of Census show an increase in production to 193,472 tons in October from 183,498 tons in September, a rise of 5 percent.

Acid, Phosphoric — Output of phosphoric acid in October increased 11 percent over September levels, according to the Bureau of Census. Production in October rose to 320,709 tons from 289,747 tons in September.

Acid, Sulfuric—Buying interest continued active, particularly for steel, pigment, petroleum and chemical use. Although rayon shipments declined in November from October levels, demand from that quarter continued good.

There has been some weakness in the market around metropolitan New York, and prices could be shaded. However, this was deemed a local situation, and prices in other industrial areas were stable.

Steel output last week was estimated at a record 2,511,000 tons, or 102 percent of capacity, by the American Iron and Steel Institute.

This compares with actual output of 2,493,000 tons, or 101.3 percent of capacity the previous week, and 2,421,000 tons, or 100.3 percent of 1955 capacity the corresponding week of 1955.

Borax—Prices on all grades are scheduled to be advanced January 1 on spot and contract.

Chlorine — This market continued strong. Producers were reported moving all they could make in an effort to keep up on contract deliveries. New business was not being sought, owing to the close supply position.

Cobalt Chemicals—Owing to recent decreases in prices of cobalt metal and oxide metal and oxide, other chemicals were expected to move downward in the near future.

Manganese Dioxide—Prices of African material took a whopping jump last week. African 83 percent manganese dioxide rose $39.50 per ton, and was quoted at $148 per ton, burlap lined paper bags, 40,000 to 99,999-pound lots, f.o.b. shipping point; $144.50 per ton, paper bags, same basis, and $152.50 per ton, drums, same basis.

Moroccan was boosted $14.50 per ton, and newly quoted at $123 per ton, burlap lined paper bags, 40,000 to 99,999-pound lots, f.o.b. shipping point; $119.50 per ton, paper bags, same basis, and $127.50 per ton, drums, same basis.

The Suez crisis has been solely responsible for the rocketing price of the Moroccan and other African ores, which largely come from the Gold Coast and South Africa.

Since the canal has been blocked, shipping space has been at a premium, and transoceanic freight rates have risen considerably. All this has occurred in the face of strong demand from nearly everyone in the end use pattern in this country.

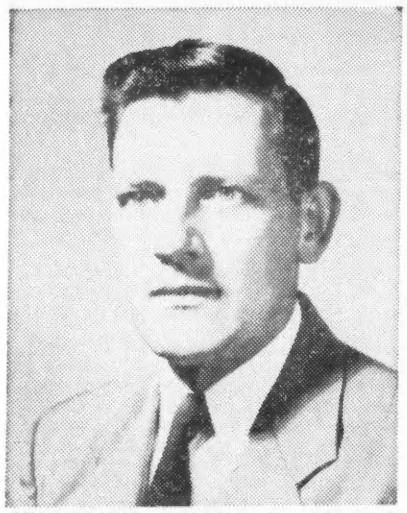
This situation has been further aggravated by a scarcity of high quality ore, and the tight position has resulted in a decrease in specifications from 84 percent to 83 percent.

A producer of manganese chemicals felt that prices of these materials would be sharply affected by the increase in manganese dioxide. However, there were no price advances announced as OPD went to press.

Phosphorus Pentoxide — One producer last week announced that it would advance phosphorus pentoxide by 45c. per hundred pounds across the board, effective January 1 on spot and contract.

This would bring the price of dry P_2O_5 up to $13.95 per cwt. in drums, carlots, f.o.b. works, freight equalized.

However, another producer announced that it would raise phosphorus pentoxide by $1 per cwt., effective on the same date. This would bring the material up to



DEVELOPMENT MANAGER: Dr. Edward F. Wagner, named to the newly-created post of manager of development by Witco Chemical Company, New York.

Heavy Chemicals

$14.50 per cwt., drums, carlots, f.o.b. works, freight equalized, and $17.50 per cwt., less carlots, same basis.

The latter, in announcing the $1-per-cwt. advance across the board, stated that sharply increased costs of labor, materials and processing over the past several years in its opinion warranted a $1 increase, rather than the smaller advance, which would be inadequate to cover costs incurred since the last price change, in 1953.

Another manufacturer contacted at mid-week felt that the $1 increase was more in line with cost-price studies in its company, but as yet, it had made no price move.

Nickel Chemicals—With the drastic increase announced for nickel two weeks ago, producers of nickel salts expected momentary increases in those products. However, none were forthcoming at press time.

Potash, Caustic—Despite the fact that many of the alkalies have been raised in price during recent months, there were no changes anticipated in prices of caustic potash for the first quarter.

Demand was moderately active for deliveries against old contracts. Supplies were readily available.

Soda Ash—Total crude bicarbonate output by soda ash producers in October increased 5 percent over September levels, according to preliminary figures compiled by the Bureau of Census.

Output in October rose to 423,468 tons, as against 403,414 tons produced in September.

Soda, Caustic — Electrolytic production rose 4 percent in October, while lime-soda output declined 2 percent, according to the Bureau of Census.

Electrolytic output was 332,937 tons in October, as against 320,937 tons in September. Lime-soda production declined to 33,584 tons in October from 34,134 tons in September.

Sodium Cyanide—Flake has been scheduled for an increase of 1½c. per pound, effective on spot and contract January 1.

Sodium Phosphates — So far, the only large volume item in this category which has been advanced is disodium duohydrate. Prices for this material will move up 25c. per cwt., effective January 1.

Tin Salts—With weaker tin, potassium stannate was priced at 72.5c. to 79.1c. per pound; sodium stannate, 59.8c. to 65.2c; stannic chloride, 81.4c. to 82.4c.; anhydrous stannous chloride, 94.6c. to $1.440; hydrous crystals, 82½c. to 83½c.; and sulfate, 99.9c. to $1.019.

Nonferrous Metals

Arsenic—A producer has announced that it will change the price of its white powdered arsenic metal from a delivered to an f.o.b. works basis, effective January 1 on spot and contract.

On that date, powdered arsenic is scheduled to list at 3½c. per pound, barrels, carlots, f.o.b. works, and 6½c. to 7½c. per pound less carlots, same basis, f.o.b. stockpoints.

Current listing for powdered white arsenic is 5½c. per pound, barrels, carlots, delivered, and 6½c. to 7½c. per pound, less carlots, same basis, as to quantity.

Cobalt—A supplier of cobalt has reduced the metal by 25c. per pound. This makes the current price of 97-99 percent cobalt $2.35 per pound, kegs, ex warehouse.

The reduction was said to be in keeping with lower prices in Europe and Africa. Cobalt oxide was also reduced, by 17c. per pound.

Copper—Market continued relatively quiet. American producers' metal remained unchanged at 36c. per pound, delivered US destinations.

Nickel—Reaction continued mixed to the recent increase of 9½c. per pound. Some sources reported that the advance was not enough to cover operational costs, and that some new producers have been planning operations on the basis of a $1-per pound price. Others appeared satisfied for the present with the 74-cent price.

Silver — Bullion continued without change, and was quoted at 91⅜c. per troy ounce, spot, on Friday.

Tellurium—A producer advanced tellurium 15c. per pound. Metal was newly quoted at $1.65 per pound, works.

Tin—Market declined last week on reports that the United Kingdom will dispose of 2,500 tons of tin in six months. Straits was listed at $1.04 per pound, spot.

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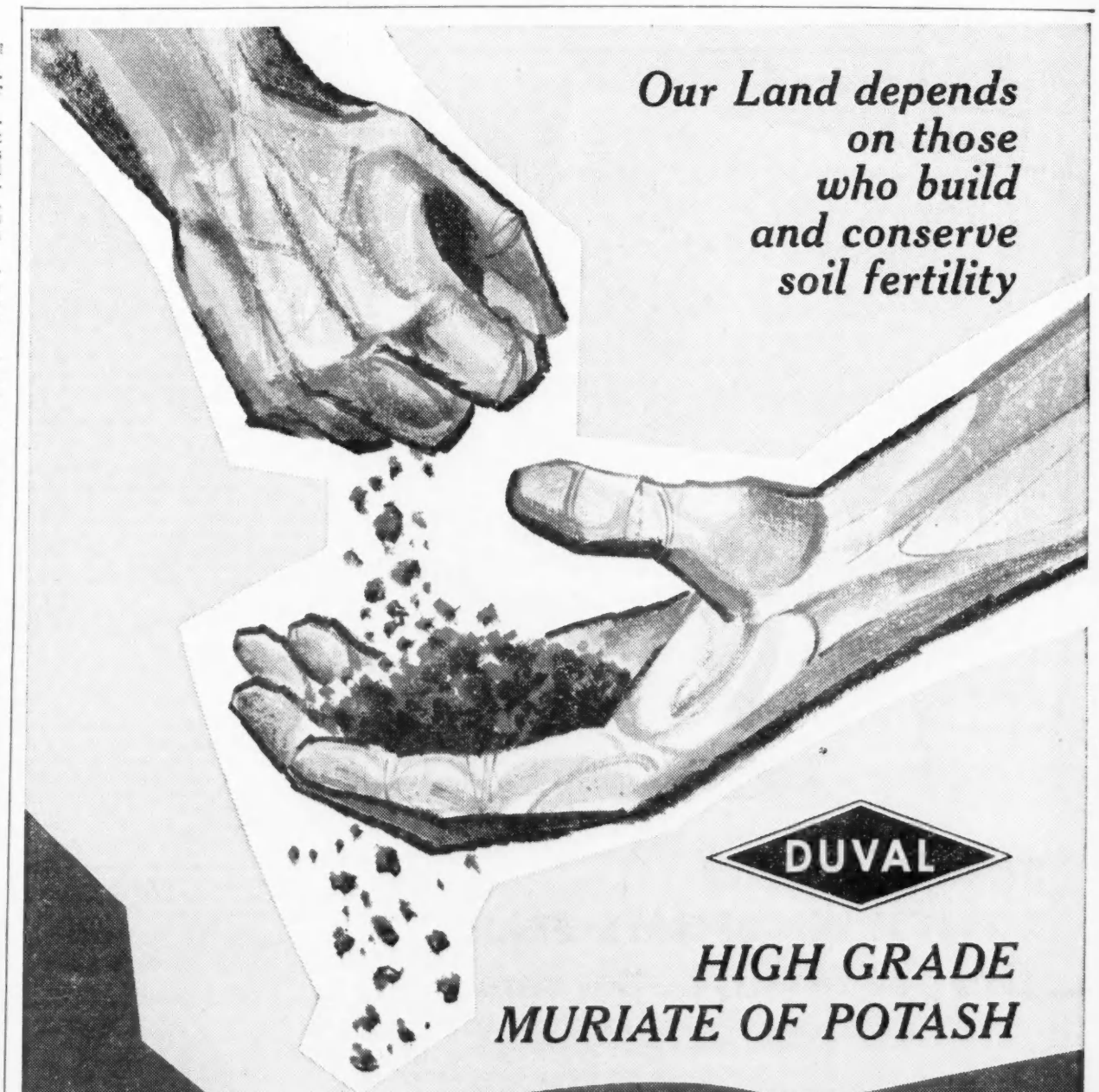

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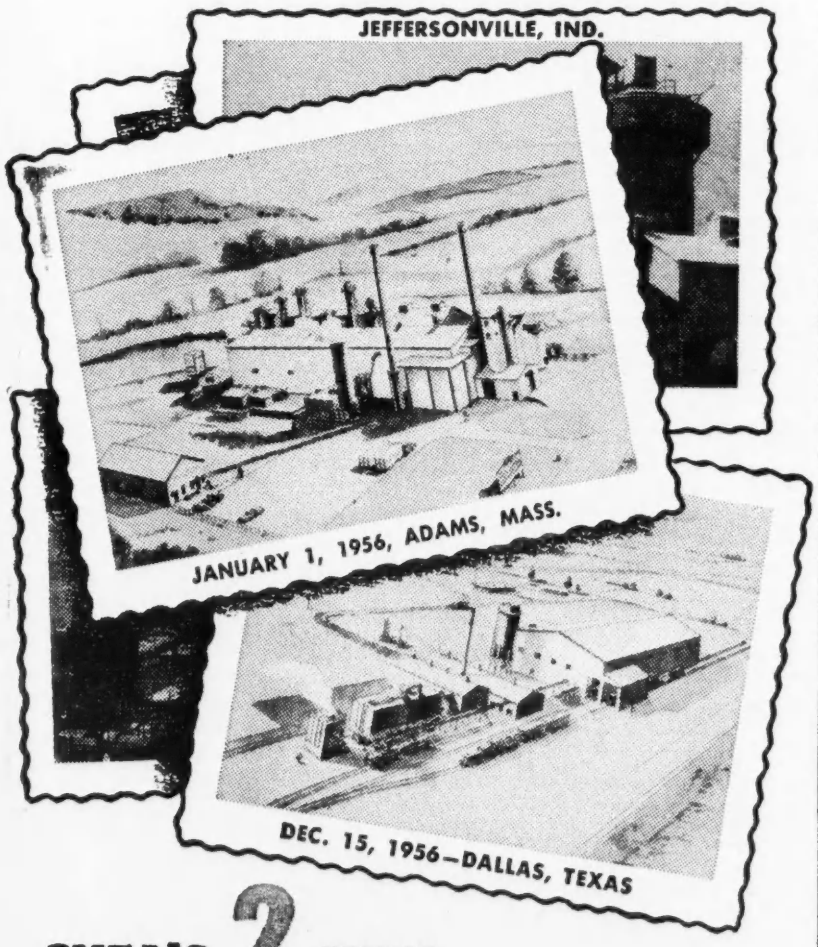

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Drug Makers Are Cautioned to Reconsider

—Continued from page 5

somely, and there is nothing in the outlook that calls for a contraction of such programs."

As for further plant and equipment expansion programs, however, he said the way was not so sure, "particularly where there are doubts about the future demand for the products to be manufactured by these facilities."

The US pharmaceutical industry has the "inherent occupational misfortune of being faced with far more potential sources of competitive patent infringement" than any other industry, APMA was told by Leonard J. Robbins, partner in Langner, Parry, Card & Langner, New York law firm.

"This is due to the nature of the pharmaceutical industry," Mr. Robbins said, "which can operate in small units based on skills rather than large capital investments. Therefore, even smaller countries can be competitors, and consequently an important new US invention must be filed in a large number of foreign countries if adequate protection is to be obtained."

"Any invention not patented in a foreign country can be used freely by foreign competitors, and all US inventions obviously cannot be protected in all foreign countries if the company is to remain solvent," he added.

Solution to Patent Impasse

Mr. Robbins said the solution is to "avoid arbitrary and empirical decisions" and "formulate a rational policy based on the nature and potentialities of the company's products and a balancing of the efforts and expense involved against the profits accruing from foreign business."

He observed that inventors and clinical investigators in the pharmaceutical field are "usually anxious to publish their results as soon as possible, and sales managers are eager to ship new products to their distributors."

"Such publication and use," he cautioned, "may automatically destroy the possibility of securing valid foreign patents."

Mr. Robbins said no "publication or commercial use should take place before the United States patent application is filed. Although harmless under the US patent law for one year, this generally is not so in any other important country except Canada."

He added that "after United States application has been filed, decisions concerning foreign filing, when to release publication and when to permit use must be made at appropriate times if full benefits are to be secured in the foreign field."

The United States patent system permits "independent product claims for new pharmaceutical products, not limited to the process of manufacture," he said, which except for a few exceptions, "is not the case in numerous foreign countries."

Under foreign pharmaceutical patents, the simplest type of pharmaceutical invention to claim is a single specific new compound, he said.

He listed three principal reasons why foreign patents are obtained: (1) As assurance of a prima facie right against others to import into the foreign country; (2) as a source of revenue from manufacturing licensees in the foreign country, and (3) as protection for manufacture by subsidiaries or affiliated companies.

"Salesmen abroad find the going smoother too when backed up by patents," he concluded.

Growth of Automation Noted

Automation's development in pharmaceutical companies is creating a need for more high-trained technicians than ever before according to E. L. Baab, corporate training manager of Olin Mathieson Chemical Corporation, New York.

Mr. Baab today told APMA that "today's competitive markets demand that we be as effective as possible in the use of our employees since a large portion of our budget is consumed as payrolls for this group."

"We must also get the maximum use out of our machines and equipment because a large portion of our capital investment is in machines and equipment," he added.

Mr. Baab said "a large number of training programs of the past have approached the problems in our plants from a very impractical viewpoint." He added the need now is for "a development and training program which meets the pertinent plant needs at the moment and tries to anticipate some of the future problems which will be encountered."

He suggested that each department

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within a plant might require its specialized training program, and added, "We feel that the appointment of a three-man training committee usually composed of a superintendent of production, superintendent from the services group and a superintendent from the maintenance group will be able to steer and control the program to keep it practical, and guide it so that maximum effectiveness in the plant is achieved."

Mr. Baab said "this may be somewhat a surprise in that we are placing the prime responsibilities for training with the line people." But, he added, "we believe that no one in the plant will know more about the problems confronting them than the line people themselves."

Statistical Controls Essential

The introduction of automatic equipment and increasingly complicated drug formulations has stimulated rapid development of precise statistical controls in the pharmaceutical industry, Dr. Martin A. Brumbaugh, director of statistics for Bristol Laboratories, Inc., Syracuse, N. Y., reported to APMA.

"This industry, perhaps above all others, has, through the years, guarded the quality of its products," Dr. Brumbaugh stated. "This is necessary because of the direct relation of these products to human welfare . . . and because of the dire consequences of quality deviation in a highly competitive market situation."

"At the same time," he added, "manufacturing operations have become much more complex through the introduction of automatic equipment and because of more complicated drug formulations. The maintenance of equality standards under these conditions requires the use of tools of analysis more powerful than was the case earlier. Statistics is one of these more powerful tools."

Dr. Brumbaugh told the association that at least sixteen distinct types of statistical analysis play important parts in the manufacture of pharmaceuticals, ranging from scientific sampling plans for raw materials to forecasting for the sales department and conducting operations research on management activties.

Engineering 'Know-How' Needed

"You should need fewer executives, supervisors and quality control people, depending on the degree of automation within your pharmaceutical plant," Charles F. Hautau, president of the Hautau Engineering Company, Ferndale, Mich., told members of APMA. "By the same token," he declared, "you'll need more engineers and maintenance people."

Unions, in Mr. Hautau's opinion, have proved cooperative in most cases with plant management over the question of automation. This is "because enlightened unions now know that we have attained our excellent standard of living, in large part, because of industry's efforts to produce better goods for less money," he declared.

Mr. Hautau, who organized his own engineering company in 1946, added that, to be successful with an automation program, it was necessary for company management to "make a determined and intelligent effort to acquaint its employees with the program and its probable effects on them."

Mr. Hautau said that vision was the most important quality of a good automation engineer. "If he has everything else," he went on, "but lacks the vision to see processes as they can and should be, he probably won't make a good automation engineer."

Mr. Hautau also emphasized that the automation engineer should be intimately familiar with the characteristics of product materials and know competitive and allied production processes.

"He should be able to forget how things have been made in the past," Mr. Hautau declared, "and be able to contribute fresh, progressive, revolutionary process thinking."

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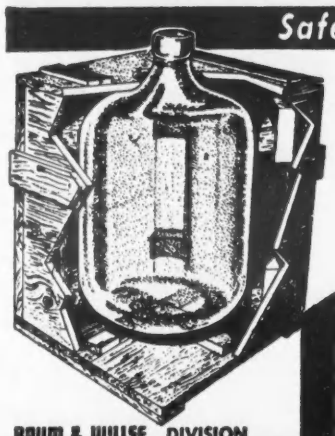

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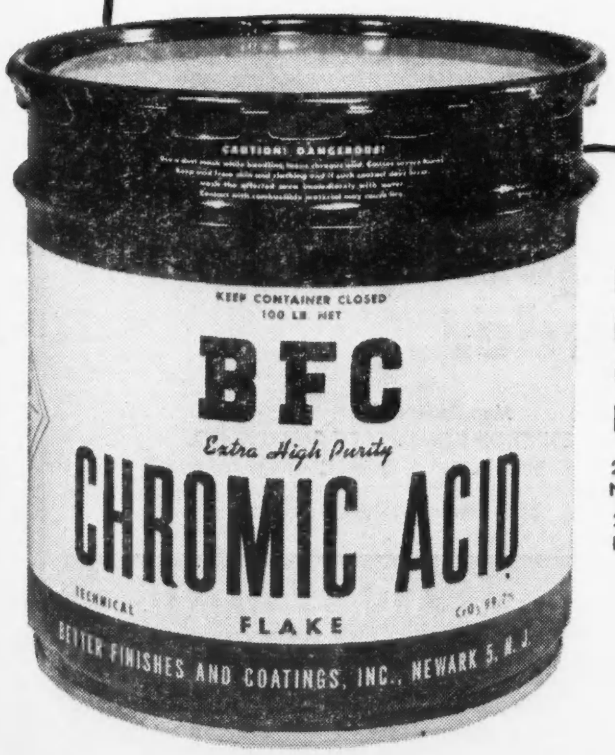

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Jobs & People

Acorn Paint & Chemical Company, Cleveland, Ohio—**Martin J. Monahan** has been appointed Acorn Paint's technical director.

American Potash & Chemical Corporation, Los Angeles — **Benjamin M. Holt** has been named by American Potash to the newly-created post of project director of the planning and development department.

Archer-Daniels-Midland Comapny, Minneapolis, Minn.—**Marvin W. Formo,** formerly research coordinator, and **Alexander Olotka,** director of the Newark, N. J., resin plant, have been advanced by ADM to assistant research directors. **Louis I. Hansen** has been promoted from research supervisor to senior research associate.

Diamond Alkali Company, Cleveland, Ohio—**Herman E. Meadows** and **George F. Ham** have been added to the technical service staff of Diamond's chlorinated products division.

E. I. duPont de Nemours & Co., Wilmington, Del.—**Robert Jack Manning** has been made product manager for duPont's new plastic material "Delrin" acetal resin, a product handled by its polychemicals department. **Edwin H. Keller** will replace Mr. Manning as marketing manager for "Tynex" nylon monofilament. Mr. Keller had been assistant marketing manager.

Givaudan-Delawanna, Inc., New York—**Ben S. Cottle, jr.,** has been named to the sales staff of Givaudan-Delawanna and its associate companies, Givaudan Flavors, Inc., and Sindar Corporation, and will represent them in the northern New Jersey area.

Goodrich-Gulf Chemicals, Inc., Cleveland, Ohio—**John R. Smith** has joined the Goodrich-Gulf as a sales representative for Ohio, parts of Indiana and western Pennsylvania.

Gulf Research & Development Company, the research subsidiary of Gulf Oil Corporation, Pittsburgh, Pa.—**Melvin J. Hill,** formerly division geologist for Western Gulf Oil Company, Los Angeles, has been appointed director of the geology and geochemistry division of Gulf Research.

Monsanto Canada, Ltd., Montreal —**R. M. Beaugrand** has been promoted to the position of operating superintendent in charge of plastics for Monsanto Canada.

Monsanto Chemical Company, St. Louis, Mo.—**John S. Sullivan** has been appointed resident sales supervisor in Sao Paulo, Brazil, for Monsanto's overseas division.

National Drug Company, Philadelphia—**Theodore E. Ersly,** formerly assistant director of marketing with William S. Merrell Company, Cincinnati, Ohio, has been named general sales manager for National Drug.

Olin Mathieson Chemical Corporation, New York—**Morgan W. Rider** has been named assistant director of Olin's technical division, New Haven, Conn., where he will be responsible for the pilot operations department and the technical products department.

Reynolds Metals Company, Louisville, Ky.—**Raymond H. Frederick** has been named technical sales representative for aluminum powder and paste products and will cover the south central states in the territory served by Thompson-Hayward Chemical Company, Reynolds distributor for powder and paste products.

Rohm & Haas Company, Philadelphia—**George T. Sohl,** for twenty-seven years Cleveland area representative of Rohm & Haas and its former associate firm, Resinous Products & Chemical Company, will retire on December 31.

Continental Can Company, New York—**George E. Dyke,** formerly chairman of the board and president of Robert Gair Company, which recently merged with Continental Can, has been elected vice-chairman of the board of Continental.

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Agricultural Chemicals

Production continued to gain strength in this market, it was reported here last week, though the end-of-the-year lull has stemmed the movement somewhat. The recent flurry of government orders (note below) has helped to tighten slightly the soft supply position that has persisted in the agricultural chemicals market since the stunted demand of the past seasonal period. Hope for the coming season remained high though some producers conceded that last year's heavy mid-west drought and the soil bank program might act as a deterent to heavy demand. Inquiries gained ground along with production, though the last two weeks of the year during which inventory usually takes place, movement usually drops to a standstill.

The International Cooperation Administration has allotted $14 million to Korea for the purchase of fertilizers from worldwide sources. Of the total amount, $10 million will be spent in outright purchases and the remaining $4 million through barter transactions.

Contracts under the former allotment will be let during the month of January with delivery by March 30, 1957. They are to cover $7 million of nitrogenous material; $280,000 of potash fertilizer, and $2.72 million of phosphate and other fertilizer materials including mixed fertilizers.

Price Trends

Advanced
None.

Reduced
Tankage, New York, 25c. per unit ton.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Dec. 16, 1955
108.70	108.72	106.30	110.78

For Current Prices see Page 9

January 1 Price Advances

Ammonium nitrate, $1 per ton.
Anhydrous ammonia, $5 per ton.
Nitrogen solution, 6c. per unit.

Fertilizers to be acquired by barter will be through contracts entered between the 20th of this month and March 31, 1957, calling for delivery by May 31, 1957. They will include $3 million of nitrogenous fertilizer, $100,000 of potash fertilizer and $900,000 of phosphate and other fertilizer materials, including mixed fertilizers.

It was noted by the government agency, in reference to the barter plan, that any offer to supply the fertilizers, involving a sales price of $100,000 or more, made on a bid basis which expresses a willingness to accept surplus agricultural commodities of the CCC as full payment in lieu of dollars will have preference over any other bid or offer where price and other terms of the bid or offer are equal.

In a government report which noted that fertilizer prices were dropping while other farm materials were advancing in cost, experts advocated greater consideration of the use of fertilizer because of its favorable price relationship to other costs. The report noted that the price of fertilizer has not increased as much as prices of other inputs, particularly since World War II. As a result, some farmers may find it more profitable to increase production by using more fertilizer than by purchasing or renting more of the limited supply of cropland.

Animal and Plant Foods

Anhydrous Ammonia—The October production figure for anhydrous ammonia, according to the Department of Commerce, amounted to 267,824 short tons as compared with the 257,014 short tons produced during the month previous. The percentage chance reflects a four percent advance in October production over that of September.

Ammonium Nitrate—Production of this material in October, according to the Department of Commerce, totaled 177,636 short tons. The figure for September was 169,866 short tons, five percent less than the October production total. Rises in production of both this material and that of anhydrous ammonia reflect production step-ups in anticipation of the seasonal sales period that usually begins early in the new year.

Animal Proteins—The shutdown of a major producer's New York plant made spot quoting in this area sligthly problematic, one dealer here noted. The plant is reportedly shifting its operations to the mid-west. The only price change in the New York area was tankage, which dropped 25c. per pound in listing and is now being offered at $4.50. Other than this the movement was light with sales limited and production down somewhat. The market is to a degree, it was noted, reflecting the end-of-the-year lull and some activity is expected to commence with the arrival of the new year. The fishmeal and fishscrap market also remained unmoved.

Nitrogen Solution—A recent government report on nitrogen fertilizer noted that available supplies reached an all time high level this year. Wholesale prices reported for most nitrogenous fertilizers were lower than for the previous year. Some seasonal changes in prices of these materials occurred. They reflected an effort to encourage summer and fall movement, thus reducng the cost of storage for the manufacturer and relieving congestion in storage and transit.

The report also noted that the consumption of plant nutrients is nearly seventy percent above the 1947-49 average but the rise has been much greater for nitrogen and potash than for phosphate. For 1955, the index of nitrogen consumption was 226; for potash, 194, and for phosphate, 125, with 1947-49 equaling the 100 mark. This reflects, the report said, recognition of the higher yield response to nitrogen and potash and the differences in prices of the three principal nutrients.

Although nitrogen costs more per pound than either of the other nutrients, response to higher applications has generally been greater, and the price per pound of nitrogen is now less relative to the price of the other nutrients than formerly. This changed relationship has been brought about, the report said, by the increased use of high analysis nitrogen solutions for both direct application and for use in making mixed fertilizers and by the expanded use of anhydrous ammonia. New developments in fertilizer technology have reduced the cost of these materials.

Phosphate—Production of concentrated superphosphate during September, according to the Bureau of Census, amounted to 57,170 srort tons, as compared with the 40,825 short tons produced during August, and the 57,379 short tons produced in September of the year previous. Stock on hand figures, both at the beginning and end of the month, reflect the heavy stores of material left in store because of last years conditions. Stocks on hand at the beginning of September amounted to 167,733 short tons, a figure very close to the 170,890 short tons on hand at the beginning of August; both figures are much larger than the 88,750 short tons left on hand at the beginning of September, 1955. Stocks on hand at the beginning of the month show no variation in this situation. The figure at the beginning of September was 160,765 short tons against 167,733 short tons for August and 92,284 short tons for September, 1955. Shipments of concentrated superphosphate during September totaled 59,956 short tons as compared with 44,629 short tons in August and 49,710 short tons in September, 1955.

Pesticides

DDT—Tenders for setting up an insecticide plant with a capacity of 1,400 tons of technical DDT annually, have been invited by the government of India at Alwaye, Kerala State.

Offers for the design, supply, installation of plant and machinery and putting the plant into operation should reach the managing director, Hindustan Insecticides Ltd., Industrial Area, New Delhi, by December 15. Steam, water and electricity will be made available at suitable points outside the factory.

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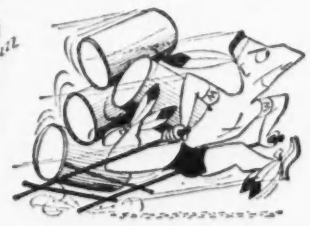
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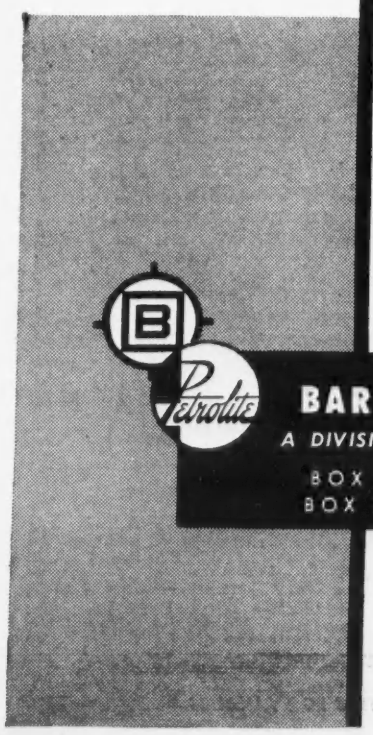

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Petroleum Derivatives

All areas of the petroleum market were steady to firm last week as a general response to the firm position of crude oil. In addition, the arrival of winter weather has brought sales of liquefied petroleum gases close to a seasonal summit. While quotations of butane and propane were unchanged, observers noted a firm undertone. Sales of benzol continued to move at a brisk pace, a pace which to some observers appeared to be in excess of actual consuming needs. In their point of view, much of the heavy buying has been of a speculative nature, reflecting the petroleum crisis brought on by the recent flareup in the Middle East. These observers expect a levelling off of business volume sometime during the next quarter, and feel that the price will hold steady.

August import figures on benzol were revised to show a total of 7,005,590 gallons, 3,876,106 gallons of which originated from behind the iron curtain. In September, imports amounted to 2,629,760 gallons, an amount regarded by trade sources as about normal, in contrast to the heavy imports reported during the summer months.

Buyers have requested 3,225,901 barrels of Texas crude oil daily in January, thus setting an all-time demand record, the Railroad Commission announced last week. The increase in demand was 141,272 barrels per day greater than the increase asked in November. In other developments, a major export company posted an increase in ship fuel oil prices at all sterling currency ports. The increase averages about 20 percent for bunker C, and is somewhat lower for diesel and diesel medium. Prices in dollar areas of the Far East are likely to be similarly increased. The sterling advances went into effect on spot December 1 and will be effective for contract buyers January 1.

American crude oil stocks declined 7,578,000 barrels last week, reflecting a lower level of imports and increased shipments to foreign points. Further declines in crude stocks are expected.

Solvents and Diluents

Benzol—The figure for benzol imports in the month of August has been revised by the Bureau of the Census to show a total of 7,005,590 gallons, of which 3,876,106 gallons originated in Russia. The cumulative total for the first eight months of the current year was 47,080,748 gallons. Imports from Russia during August were valued at $994,397, or 25⅛c. per gallon. In September total imports declined to 2,629,760 gallons, an amount which trade sources regard as closer to normal, in contrast to the heavy volume imported during the Summer months.

To many observers the brisk pace of buying in recent weeks appears to be somewhat in excess of the actual production requirements of consumers. In the view of these observers, much of this buying has been of a speculative nature, reflecting directly or indirectly the petroleum crisis brought on by the recent troubles in the Middle East. If this point of view is correct, it may be expected that buying will fall off during the first quarter, when consumers' stocks should be at a maximum, and when the world petroleum situation will have stabilized.

Pricewise, the market was described last week as steady. The firm undertone noticed previously was not in evidence. The consensus among producers was that quotations would in all probability hold at current levels in the weeks immediately ahead.

Mineral Spirits—Along with lacquer diluent, this material has responded to excellent demand during the quarter. Last week's business volume was reported to have been seasonably moderate. Prices continued unchanged at long established levels.

Toluol—Increased use of petroleum toluol in high octane gasolines was again reported last week. This trend has gained much momentum with the fact that each new model car features a bigger and stronger motor, requiring often a richer gasoline. The marketing by a major oil concern of an automobile gasoline approaching aviation gasoline in octane number has underscored the virulence of this trend. Much of the relief noted in the inventory problem of the coaltar industry may be traced to this as well as to the recent steel strike. But since this trend is matched by an equally strong trend toward expanded production of steel, the long term future of toluol remains clouded.

Exports of toluol in September amounted to 2,483,975 pounds, as compared with 4,847,151 pounds in the previous month, making a total for the first nine months of the year of 43,447,493 pounds.

PriceTrends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Dec. 16, 1955
105.71	105.71	105.71	104.32

For Current Prices see Page 9

LPG'S

Butane—The weather is cold enough in most sections of the country to sustain a brisk rate of demand for this liquified gas. Increased underground storage space should assure adequacy of supplies during the season, although if the winter turns out to be unusually severe, stocks could become tight in some areas. Butane production in September was reported at 182,178,000 gallons by the Department of the Interior.

Propane—The position of this gas is similar to that of butane. Sales are seasonably brisk and are showing an increase over last year's total. As a result of the seasonal factors, prices are very firm, but no advances have been reported. Supplies are expected to be adequate.

Waxes

Microcrystalline—Reports received from producers indicate that the export market and the paper industry are still providing substantial areas of expansion for this wax. Quotations held unchanged last week, and no first quarter changes have been reported. The last revision was ½c. advance posted October 1. Supplies are amply available for all consumer requirements.

Paraffin—This material was quotably unchanged at 7.10c. per pound for crude and 8.15c. per pound for refined. Supplies were plentiful and encountered good demand, particularly from the paper industry.

Miscellaneous

Crude Oil—Current reports of the industry for the week ended November 30 indicate a decrease in crude-oil production and an increase in crude runs. According to the A.P.I., the daily average output of crude (including lease condensate) was 7,133,000 barrels, a decrease of 62,000 barrels from the preceding week. Daily average crude runs to stills of 8,114,000 barrels were 3,000 barrels above the preceding week, and 313,000 barrels above the week ended December 2, 1955. Runs of foreign crude amounted to 923,000 barrels daily, compared with 929,000 barrels in the preceding week. For the four-week period ending November 30 crude oil production averaged 7,136,000 barrels daily and crude runs to stills averaged 8,039,000 barrels daily with runs of foreign crude averaging 992,000 barrels daily.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended December 1 totaled 275,253,000 barrels, according to data reported to the Bureau of Mines. Compared with the total of 279,842,000 barrels for the preceding week, this represents a decrease of 4,589,000 barrels, comprising a decrease of 4,268,000 barrels in stocks of domestic crude and a decrease of 321,000 barrels in stocks of foreign crude.

Hormone-Containing Yam Cultivated in Puerto Rico

Puerto Rico has started to mass produce locally the hormone-containing Dioscorea yam which up to now has originated in the jungles of Mexico.

The venture could mean lower prices in the United States for cortisone and a long string of other vegetable based hormones because of the nearness of supply, it was pointed out.

Behind this development is Root Chemicals, Inc., one of the three hormone intermediate producers in Puerto Rico whose combined shipments to the United States each year now approach the $5 million level. All three use Mexican yams as starting material, it was reported.

Encouraged by Department of Agriculture tests showing that the wild growing Dioscorea has a good chance of mass planting in Puerto Rico Root Chemicals has put the first section of a 1,000-acre plot under cultivation.

Rated as the world's second largest producer of vegetable extracted hormone steroids, Root has announced plans to triple monthly production from $100,000 to $300,000. It is now adding $100,000 worth of new equipment to handle the additional output which according to Vice-President Alfred Sollins will grow from eight items to fifteen.

The company's current product line includes progresterone, testostrone, estrone, cortisone and hydrocortisone.

Middle East Control

—*Continued from page 7*

in a resolution, copies of which were to be sent to the Office of Defense Mobilization and to the President, stating that "security cannot be dependent upon importing crude oil and products, and imports should not supplant domestic production."

The resolution pointed out that "several times before, the IOCC has called attention to the fact that imports of foreign crude products could be a detriment to the state conservation programs.

"The present crisis caused by the closing of the Suez Canal has proved the unreliability of importing crude oil and products," it was stated.

"The free world today is dependent upon the excess producing capacity of the United States that has been caused by the conservation programs of the individual states," the resolution pointed out.

Shipments May Rise Considerably

Minor S. Jameson, jr., presidential assistant at the Independent Petroleum Association, told the IOCC that the United States may be shipping 500,000 barrels of oil daily to Europe and Africa, an increase of 525 percent over pre-Suez, to offset shortages caused by the Middle East situation.

"In addition to the increases in United States oil exports [the situation] will reduce planned imports into the United States by 300,000 barrels daily or more," he said. This increase in exports and decrease in imports may mean the demand for domestic crude oil will rise 700,000 or more barrels per day.

"That would bring domestic production to the 7,800,000 per day class," he continued.

"Ample availability of domestic oil has given the United States a position of strength and world leadership that is a deterrent to war," Mr. Jameson said.

Intelligent conservation of oil means that the United States has the petroleum availability now to meet the current world crisis, H. A. Stewart, director of the Office of Oil and Gas of the Department of the Interior, said.

Mr. Stewart paid tribute to those member states of the IOCC and said that "because of thinking of the future as well as the present," our country can meet the oil needs of the free world.

With regard to increased production to meet Europe's needs, Mr. Stewart said that "the Federal government has no intention of asking or even suggesting to any state what its allowable should be or how it should be regulated."

Gary to Be Chairman

Oklahoma's Governor, Raymond Gary, will be chairman of the commission for 1957, it was announced. The Oklahoma chief executive will have Clarence T. Smith, of Flora, Ill., and J. P. Jones, of Bradford, Pa., as first and second vice-chairmen, respectively.

Judge Earl Foster was again selected executive secretary, an office he has held since 1944.

At a banquet, retiring chairman John F. Simms, Governor of New Mexico, was presented with a plaque on behalf of the compact member states for the "outstanding and meritorious work he has done as chairman."

Hiram M. Dow, one of the original founders of the IOCC, of Roswell, N. M., presented the plaque.

Three states were officially made members of the executive committee. They are Montana, Pennsylvania and Wyoming.

The executive committee is now composed of the governors or their representatives from the three states above and the following: Arkansas, Colorado, Illinois, Kansas, Louisiana, New Mexico, Oklahoma and Texas.

Cyanamid Sets Up

—*Continued from page 3*

designated the nitrogen and allied products division and will handle the bulk sale of fertilizers, insecticides, and mining chemicals. F. S. Washburn will be general manager of that unit.

In addition to veterinary products, the farm and home division will also develop and market antibiotic, vitamin and medicated supplements for the animal feed industry; packaged insecticides and other agricultural chemicals for crop farming; and "Acronize," the food freshness process based on the antibiotic "Aureomycin" ch'ortetracycline.

For a time after the changeover date, some veterinary products will continue to bear the Lederle label, Mr. Towe said, even though processed by the new division. Eventually, however, all these products, which will be sold through the division's new animal health department, will bear a redesigned label containing the American Cyanamid insignia.

Mr. Towe said he anticipated no change in present warehousing and shipping procedures and that the present veterinary sales staff in the field would be maintained.

Mr. Towe also announced that the farm and home division will construct a 600-acre agricultural center near Princeton, N. J., which will include an experimental farm. The center will be used to convert basic research data assembled at Cyanamid laboratories around the country into new and improved agricultural products.

Mr. Towe pointed out that all these products, while their methods of application and distribution differ, have a common denominator of benefit to the farmer.

"In each case," he said, "such drugs and chemicals are applied to increase and improve food supplies through the preparation of soil, enhancement of animal and plant growth, control of diseases and insects, and the maintenance of food freshness."

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Aliphatic Organics

Additional price advances announced last week effective January 1 were 2 cents per pound for USP hexamethylenetetramine, 7/10 cent per pound for 91 percent paraformaldehyde in powder form and 1 cent per pound for n-propyl acetate. Technical hexamethylenetetramine and USP, X paraformaldehyde price increases had been announced previously. The flake form of 91 percent paraformaldehyde was not expected to increase in first quarter 1957. Drum differentials were slated to increase January 1 by 1 cent per pound for 85 percent capryl alcohol and by ½ cent per pound for n-propyl acetate, propylene oxide and dipropylene glycol.

Additional major producers announced they would increase methanol prices 2½ cents per gallon across the board effective January 1, giving momentum to a move that began a few weeks ago and had by now become virtually industrywide.

Following a period of unremitting price advances and sluggish demand that began late in September, the New Orleans market for blackstrap molasses steadied last week. There was a technical advance of ½ cent per gallon in price, but the going quotation now was actually the prevailing price in the week previous, few sales having been reported at the lower figure listed at that time. Demand was now moderate, with supply adequate.

Price Trends

Advanced
Molasses, New Orleans, ½c. per gal.

Reduced
None.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 16, 1955
130.80	130.79	130.43	130.68

For Current Prices see Page 9

January 1 Price Advances

Formaldehyde, inhibited, 3/10c. per lb.
uninhibited, ¼c. per lb.
Hexamethylenetetramine, tech., 1.1c. per lb.
USP, 2c. per lb.
Methanol, 2½c. per gal.
Paraformaldehyde, 91%, powd., 7/10c. per lb.
USP, X, 7/10c. per lb.
n-Propyl acetate, 1c. per lb.

Molasses was unchanged at New York. Demand there continued moderate, supply adequate.

Glycerine stocks mounted again in October, but apparent domestic consumption during that month was up more than 4 million pounds over the corresponding figure for the month previous.

sec-Capryl alcohol was getting steady demand. Most of it was for use in manufacture of esters, chiefly dicapryl phthalate, dicapryl sebacate and dicapryl adipate. Some material was moving into use in germinating beds for the mycins. New markets were under development, but their potential was still uncertain.

Demand for formaldehyde for manufacture of resins continued notably strong.

Capryl Alcohol—Drum differentials on the 85 percent grade will be hiked 1c. per pound by a major producer effective January 1 to offset increased packing costs. Drum prices after that date, on a works basis, will be 19c. per pound in carlots and 19½c. per pound in less carlots. Drums weigh 360 pounds net.

In tankcars and tanktrucks, the price will remain at 16½c. per pound, freight equalized.

Less than drum quantities will be priced at 29½c. per pound.

Differentials on secondary capryl testing 92 to 99 percent were increased ½c. per pound last spring. Current quotations on this material were 19½c. per pound in tankcars and tanktrucks, 22c. per pound in carlots, minimum of 75 drums of 55-gallon capacity each, 23c. per pound in less carlots, minimum of 10 drums, 24c. per pound for 1 to 9 drums and 30c. per pound for less drum quantities.

Demand for the secondary has been steady all year, the material moving in substantial volume. Primary outlet was for use in manufacture of esters, chiefly dicapryl phthalate (largely a captive consumption), dicapryl sebacate and dicapryl adipate. Additional demand stemmed from use of secondary in the germinating beds for the mycins. The makers said that a number of new uses of undetermined market potential were currently under development.

Supplies of secondary were adequate.

Dipropylene Glycol—Drum differentials were scheduled for a ½c. per pound increase effective January 1. Prices for the material in tanklots will remain unchanged on that date.

New quotations in the east will be 15¼c. per pound (as before) in tanklots, 17¾c. per pound in carlots and 18¾c. per pound in less carlots. Shipping terms will be on a delivered basis for tanklots and carlots, on a works basis for less carlots.

Zone 2 prices (applicable in Arizona, California, Idaho, Montana, Nevada, Oregon, Utah and Washington) will be 1c. per pound higher across the board.

Formaldehyde—In line with the general advance on formaldehyde prices announced in the week previous and effective January 1, a producer of 44 percent uninhibited material increased his price in the east effective on that date, by 3/10c. per pound. Since he will list uniform prices throughout continental US hereafter, and since the differential charged against western accounts was equal to the 3/10c. per pound advance, the quotation on this material in the west will remain unchanged. The new, uniform price will be 5c. per pound.

Amount of the increase corresponds to that previously announced for methanol-inhibited grades. Uninhibited 37 percent material was slated to advance ¼c. per pound.

Aside from abnormal buying interest attributable to rising prices, the market for formaldehyde was vigorous last week. Very heavy demand was stemming from manufacturers of formaldehyde-type resins, in particular.

Glycerine—Producers' stocks mounted to 66,530,000 pounds by October 31, Association of American Soap and Glycerine Producers noted. However, the figures (all based on 100 percent glycerine content) indicated domestic disappearance during October was up more than 4 million pounds as compared to that during the month previous.

Production in October was 21,256,000 pounds, while imports amounted to 1,913,000 pounds. Exports were 717,000 pounds. Since stocks increased from 65,892,000 pounds at the beginning of the month to 66,530,000 pounds by the end of the month, domestic disappearance during the month was calculated as 21,814,000 pounds.

For September, production was 19,242,000 pounds, with imports at 2,026,000 pounds and exports amounting to 849,000 pounds. Stocks rose during that month from 63,234,000 to 65,892,000 pounds, indicating disappearance on the domestic market was 17,761,000 pounds.

For the first ten months of this year, totals were production of 205,250,000 pounds, imports of 14,662,000 pounds and exports amounting to 8,695,000 pounds. Stocks rose from 51,977,000 pounds January 1 to 66,530,000 pounds October 31, indicating cumulative domestic disappearance of 196,664,000 pounds.

In the like period of 1955, totals were 183,416,000 pounds produced, 23,302,000 pounds imported and 8,814,000 pounds exported. Stocks rose during the period from 42,359,000 to 45,040,000 pounds, indicating consumption by the domestic market amounting to 195,223,000 pounds.

The tone of this market had picked up notably in recent weeks. The generally high level of industrial activity was giving glycerine sales a big boost, producers said. In the resins field, price advantage and greater adaptability apparently had limited the market area that could be displaced by pentaerythritol.

Hexamethylenetetramine — Prices will be advanced 2c. per pound effective January 1 across the board on USP material, it was announced last week. New quotations, delivered basis in New York city and Philadelphia, elsewhere works, Fords, N. J., will be 42½c. per pound for 500 pounds or more, 43½c. per pound for 100 pounds minimum, 47½c. per pound for 50 to 99 pounds and 48½c. per pound for 25

Aliphatic Organics

to 49 pounds. The material was packaged in bags.

A 1.1c. per pound increase in prices of the technical grade, across the board, was announced in the week previous. It, too, will go into effect January 1.

USP material was traded in relatively light volume. Practically its only use was in pharmaceutical prepartions prescribed for treatment of kidney ailments and related disorders of the urinary tract. Such prescriptions had been supplanted in large part by more modern drugs.

The market for technical material, on the other hand, was robust. Use of the material to promote methylene linkage was growing along with the market for the new shell molding resins, for the curing of which it was regarded as particularly adaptable.

Methanol—Additional major producers gave momentum last week to the move to increase prices 2½c. per gallon across the board effective January 1. The revision was now virtually industrywide, and there seemed no doubt that it would stick.

For Zone 1, comprising all continental US except Arizona, California, Idaho, Nevada, Oregon, Utah and Washington, January 1 prices were listed as 32½c. per gallon for tankcars, 35½c. per gallon for tankwagons, 48½c. per gallon for carlots and 55½c. per gallon for less carlots. A delivered basis applied except for less carlots, which was on a works basis. Prices will be 3c. per gallon higher in Zone 2 (balance of continental US).

Demand continued strong for solvent use by the leather and petroleum industries, use as a raw material in manufacture of formaldehyde and use in automotive and aviation fuels. Diverse new uses were developing market potential, and the outlook was regarded as bright.

Tariff Commission reported production of synthetic methanol amounted to 115,989,226 pounds in September, compared to output of 130,942,614 pounds in the month previous. The 1956 total for the first nine months was brought to 1,124,236,778 pounds. Total production in entire year 1955 was 1,331,991,608 pounds of synthetic.

The commission reported no figure for production of natural methanol in September. The natural figure in the month previous was 1,301,440 pounds.

Molasses—The New Orleans blackstrap market steadied last week after an unremitting period of rising prices and sluggish demand that had lasted since the last week in September. There was a technical price increase of ½c. per gallon, but the latest quotation, 28c. per gallon, was actually the prevailing price in the week previous, when a range of 27½c. to 28c. per gallon was reported.

Agricultural Marketing Service described demand in New Orleans as moderate. Its previous reports through several consecutive weeks had said it was slow to moderate. Supply continued adequate.

The New York market was unchanged on all counts. The price there remained at 28c. per gallon, with supply adequate and demand moderate.

Prices now stood 173 percent advanced at New Orleans and 132 percent advanced at New York, as compared to quotations early in 1956.

Grinding operations were begun December 4 by Central Rio Cauto, commencing production of the 1957 Cuban blackstrap crop. The Cuban National Cattlemen's Association sought to have 10 million gallons set aside for feeding of Cuban livestock, compared to the 6 million pounds that was earmarked for that purpose a year ago.

Paraformaldehyde—Powdered 91 percent material will be increased in price by 7/10c. per pound effective January 1 across the board. On a freight allowed basis, the new quotations will be 16.7c. per pound in carlots, 18.2c. per pound in less carlots. The material was packaged in bags.

Up to week's end, quotations on 91 percent flake had not been slated to change. The trade expected flake to remain unchanged through first quarter 1957.

The advance on powder was similar to one announced in the week previous for USP, X paraformaldehyde, also scheduled to go up 7/10c. per pound across the board effective January 1.

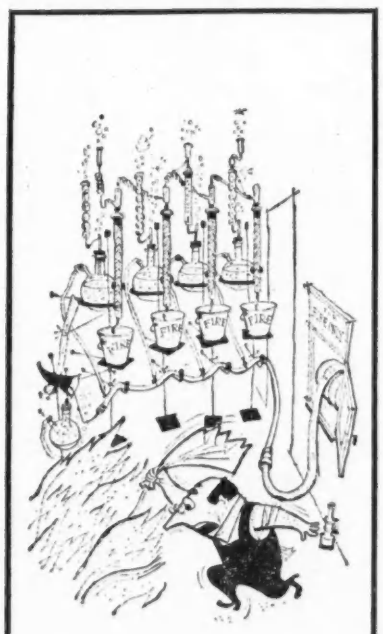
Powdered 91 percent material was considered to be competitive with USP. Its market was not closely related to that for 91 percent flakes. The latter, more analagous tradewise to aqueous formaldehyde, was moving in big volume, in particular to manufacturers of melamines, phenolics and ureas. The powder, on the other hand, was finding only limited market applications, restricted largely to manufacture of resorcinol resins and other specialties requiring small (order of 200 mesh) particle size.

n-Propyl Acetate—Bulk prices were slated to rise ½c. per pound January 1. Drum differentials will advance ½c. per pound at the same time. The new quotations will be 11¾c. per pound in tanklots, delivered basis; 14¼c. per pound in carlots, same basis, and 15¼c. per pound in less carlots, works basis.

Prices of n-propyl acetate were previously hiked ½c. per pound across the board on October 1.

Propylene Oxide—Drum differentials will be advanced ½c. per pound effective January 1, a major producer announced last week. Quotations in the east after that date will be 16½c. per pound (unchanged) in tanklots, delivered basis; 18c. per pound in carlots, delivered basis, and 19c. per pound in less carlots, works basis.

Prices in Zone 2 (comprising Arizona, California, Montana, Nevada, Oregon, Utah and Washington) will be 1c. per pound higher across the board.



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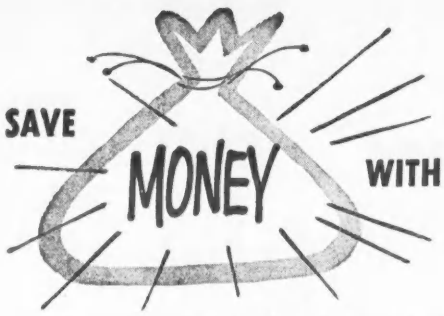

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Gov't Moves

—Continued from page 5

substitution therefor of supplies from the Western Hemisphere.

(2) Diversion to Western Europe and the other areas supplied from the Persian Gulf to Canada East Coast and substitution therefor of Western Hemisphere petroleum.

(3) Diversion to the Mediterranean region and other affected areas of supply movement from the Eastern Mediterranean to the United States East coast and substitution therefor of Western Hemisphere supplies.

(4) Diversion to the Mediterranean region and other affected areas of movement from the Eastern Mediterranean to Canada East Coast and substitution therefor of Western Hemisphere supplies.

(5) Diversion to the Mediterranean area of supply movements from the Eastern Mediterranean to Western Europe and substitution therefor of Persian Gulf or Western Hemisphere supplies.

Schedule No. 2 provides for three major diversionary movements or measures consisting of: (1) Diversion to Western Europe and other Eastern Hemisphere areas west of Suez of supply movements from the Caribbean to South American East Coast and substitution therefor of Persian Gulf supplies.

(2) The routing of tankers from Europe to the Caribbean to move supplies from that area to South American East Coast and thence to the Persian Gulf in ballast instead of having the return voyage being made in ballast from Europe to the Persian Gulf; and

(3) Diversion to Western Europe and west of Suez Eastern Hemisphere area of supply movements from the Caribbean to United States and Canada East Coasts and substitution therefor of available United States Gulf supplies.

Mr. Wormser stated that the criteria presently being used by the administrator to determine whether he should approve a schedule recommended by the Middle East Emergency Committee are:

1. That the program set forth in the schedule is reasonably calculated to reduce petroleum shortages in friendly foreign nations which have arisen as a result of the Middle East petroleum transport stoppage.
2. That the program will not either by itself or in conjunction with actions taken under other approved schedules, cause a deficiency of petroleum supplies within the United States.
3. That the program is in the public interest.

Secretary Wormser emphasized that it continues to be the view of the Government that the programs followed should not result in petroleum shortages in the United States. The Administrator has the power to terminate any schedule and program at any time. Thus he can terminate any program which is causing or contributing to petroleum shortages within the United States.

The first two schedules set forth programs designed to minimize the present petroleum shortages outside of the United States arising out of the Middle East petroleum transport stoppage through the Suez Canal and certain Mediterranean pipelines.

These schedules, which were recommended by the Middle East Emergency Committee pursuant to the plan of action as amended and approved by the government, will result in the more efficient utilization of tankers and other petroleum transportation facilities through the rearrangement of present and planned petroleum movements.

Data Offered

Beacon Chemical Industries, Inc., 33 Richdale, Cambridge 40, Mass., has issued one-page data sheets on **8-hydroxyquinoline, o-aminophenol, quinoline N-oxide, nicotinic acid, o-nitrophenol, 4-nitropyridine N-oxide** and **triphenylphosphine.**

A new four-page **products bulletin** listing its line of over 200 fine chemicals, intermediates and industrial chemicals has been published by Aceto Chemical Company, 40-40 Lawrence street, Flushing 54, N. Y. Copies are available on request.

A new technical bulletin on **epoxy curing agents** (F-8665) may be had on request from Carbide & Carbon Chemicals Company, a division of Union Carbide & Carbon Corporation, 30 East 42nd street, New York 17.

A new thirty-six-page booklet describing four **tertiary-alkyl primary amines** is now available from Rohm & Haas Company, Washington Square, Philadelphia 5, Pa. It gives physical and chemical properties, suggested applications and chemical reactions for tertiary-butylamine, tertiary-octylamine, "Primene 81-R" and "Primene JM-T."

The complete line of Nopco's **processing chemicals for the paint industry** is described in a newly issued booklet. It gives a descriptive listing of Nopco's anti-foaming agents, pigments dispersing agents, freeze-thaw stabilizers, thickeners, viscosity stabilizers, surface active agents and stearates. A free copy of the booklet is available by writing to Department PC, Nopco Chemical Company, Harrison, N. J.

Dow Chemical Company has published a new forty-page edition of its **general products catalog.** Detailed data is given in tabular form. Copies are available at no charge from Dow technical service and development, Midland, Mich.

Stein, Hall & Co., 285 Madison Avenue, New York 17, has published a new sixteen-page booklet on "Jaguar," its line of **guar gums.** It gives physical and chemical properties as well as data on Food and Drug Administration standards, handling, types offered and applications.

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IN CANADA: W. C. Hardesty Co. of Canada, Ltd., Toronto

RESEARCH DIRECTOR: Dr. Gerson S. Schaffel, appointed director of research for Scientific Design Company, New York.

Systemic Pesticide Tests Are Successful on Cotton

Systemic insecticides used for seed treatment have given generally excellent control of thrips, aphids, and spider mites where these pests have been a problem on seedling cotton.

Results of the 1956 tests of the systemics in twelve southern states were reported last week at the National Cotton Council's Beltwide Cotton Production Conference in Birmingham, Ala., by K. P. Ewing, of the agricultural research service of the Department of Agriculture.

Armed with an effective new systemic chemical, "Bayer 19639," in addition to one that proved successful in field trials last year, "Thimet," formerly "Cyanamid 3911," USDA and state entomologists teamed with industry to determine the most effective and economical means of applying these insecticides.

"Thimet" is produced by American Cyanamid Company, New York, while "Bayer 19639" is made by Farbenfabriken Bayer GmbH, Leverkusen, Germany.

Systemic insecticides enter the sap stream of a cotton plant and are translocated to all parts of the plant, so that susceptible insects which feed on it are killed. Once in the sap stream, systemics retain for several weeks their ability to control various insects and mites.

The most effective method of application, among four methods tried experimentally, continued to be the treatment of cottonseed, before planting, with carbon dust mixed with 50 percent of insecticide.

Striking results were obtained in aphid control. Two months after planting, treated plants in the most heavily infested field were about twice as tall as untreated plants.

Effect of the systemics on cotton plants varied considerably. Seed germination was retarded in many but not all cases. Toxic effect on newly emerged plants was common. However, this effect rarely persisted after leafing. Early growth and fruiting was inhibited or delayed in some cases but greatly accelerated in others.

Margarine Sales Peak Is Expected Next Year

Margarine sales in 1957 may well exceed all previous records, S. F. Riepma, president of the National Association of Margarine Manufacturers, believes.

Addressing the annual meeting of the NAMM in Chicago last week, Mr. Riepma cited the following reasons why a record sales volume can be expected next year:

- Sales of margarine for the first ten months of 1956 are already above those for the comparable period of 1955, indicating that margarine sales are coming back strongly from their temporary downturn of a year ago.
- Margarine manufacturers are continuing to merchandise their product with the traditional aggressiveness that has characterized the more economical spread from its inception.
- Through constant research, continued progress is being made in product improvement, improved packaging design, and quality-control methods.
- The record soybean crop insures the availability of sufficient quantities of soybean oil, the largest single ingredient of margarine today.
- Figures published by the Department of Agriculture indicate the possibility of a decrease next year in the volume of tax-subsidized surplus butter being "dumped" into domestic markets at the expense of margarine and its farm producers.

Mr. Riepma pointed out that margarine production (which is approximately equivalent to consumption) last year totalled 1,333 million pounds. This year, it is expected to reach 1,350 million pounds, according to preliminary estimates compiled by the Department of Agriculture and may go higher. If this prediction is borne-out, 1956 will be the biggest year for margarine since the record production of 1,364 million pounds in 1954.

This year, more margarine than butter will be sold in retail stores, Mr. Riepma concluded.

Celotex Acquires Land, Buildings for Research

Celotex Corporation, Chicago, has acquired twelve acres of land and 60,000 square feet of buildings in Des Plaines, Ill., as a major step in expansion of its research activities.

The Des Plaines location will become the main center of research. In addition, existing facilities in other parts of the country will be maintained. Research under way in those places will continue.

Celotex will take possession of the property January 3, 1957. Some personnel and equipment will be moved there shortly after January 3 from the present research center in Chicago.

Structures now on the Des Plaines site include a two-story office building, garage, power plant, loading dock, and some building space suitable for research activities.

McKesson Chemical Dept. Fills 3 Sales Positions

The chemical department of McKesson & Robbins, Inc., New York, has appointed Edward J. Dockry assistant product manager for antioxidants, covering the east central, north central and west central states.

John P. Hobe has been named assistant product manager for antioxidants with territory in New England, the east central, and southeastern states.

B. G. Bankston has joined the feed supplement sales force of the chemical department. He will cover the state of Oklahoma, headquartering at Dallas, Tex.

Huber Fills Executive Post

Gerald W. Harris has been named vice-president of J. M. Huber Corporation, New York, in charge of the industrial products department. Since June, 1954, Mr. Harris has been assistant to the late R. H. Eagles, former vice-president who died November 14.

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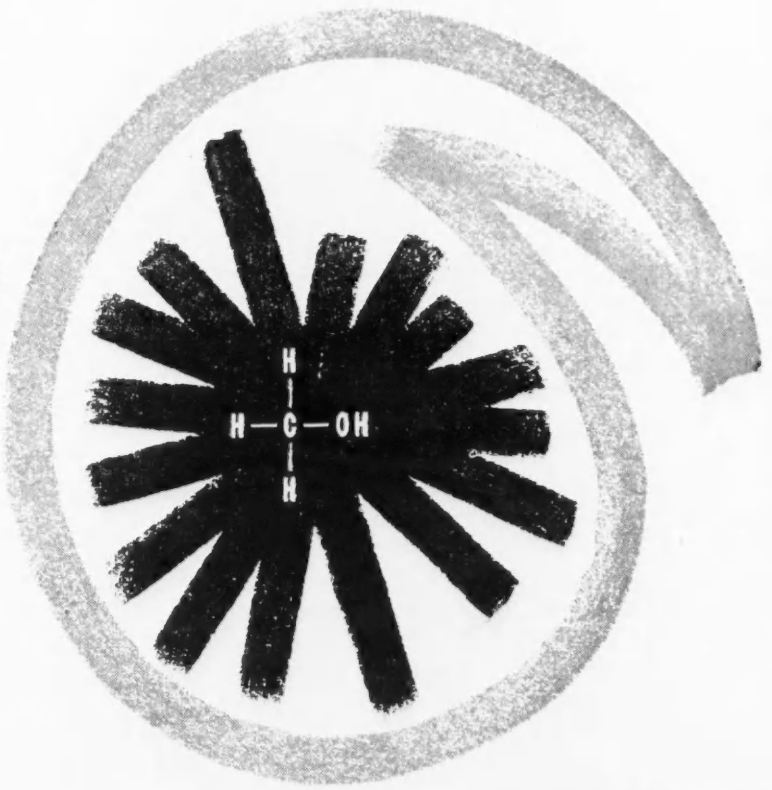

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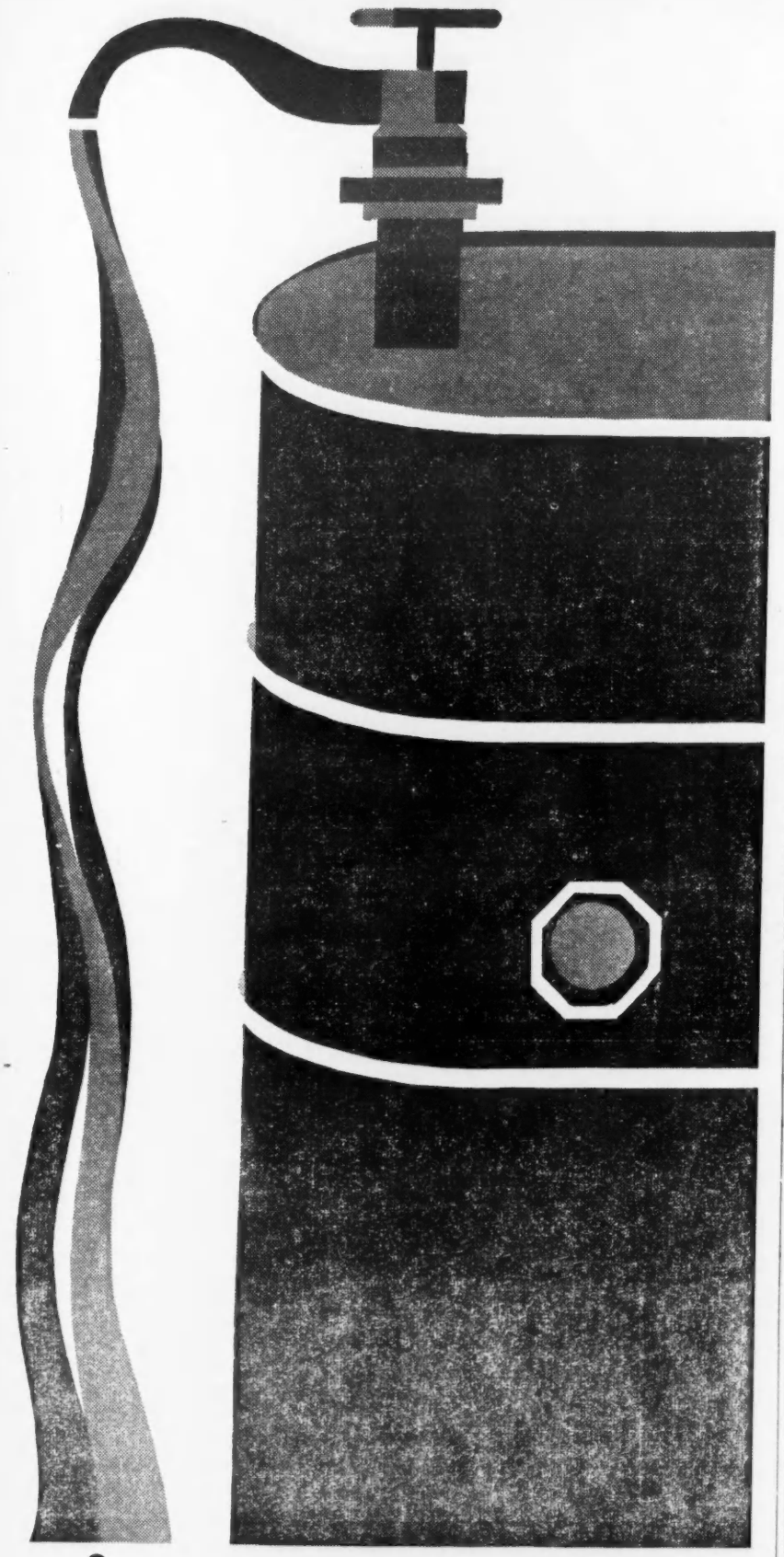

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Coal Chemicals

An additional 129 textile dyes were scheduled last week to be affected by increases January 1 amounting to about 18 percent on an average, including 14 of those regularly quoted in OPD price listings. Along with other dyes slated for a similar increase announced two weeks earlier, the number of textile dyes now quoted higher effective at the first of the year was 496, including 67 of those listed in OPD price quotations.

Nearly all cost factors in manufacture and shipment were behind the general advance. Specifically cited factors were raw materials, labor, research and technical services.

Operation of new production facilities for p-cresol was being rapidly accelerated to rated capacity as producers strived to close the gap between supply and demand. Supply was still way behind, but trade sources said balance might be attained in from 30 to 60 days. The heavy demand for para for manufacture of 2,6-di-tert-butyl - p - cresol, 4-methyl-6-tert-butyl phenol and other antioxidants was being supplemented by very substantial demand in the essential oils industry,

PriceTrends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Dec. 16, 1955
115.56	115.56	115.56	114.62

For Current Prices see Page 9

January 1 Price Advances

Acid, fumaric, 1½c. per lb.
Coaltar, crude, 1.6c. per gal.
Creosote, coaltar, crude, 2c. per gal.
soln., 80%, 1.92c. per gal.
Dyes, coaltar, for general use in cloth dyeing, Color Index numbers 27, 31, 36, 40, 57, 79, 151, 161, 176, 179, 180, 185, 202, 208, 216, 234, 246, 275, 289, 299, 304, 326, 332, 365, 382, 401, 406, 419, 420, 448, 518, 561, 593, 596, 620, 639, 640, 655, 657, 662, 667, 671, 698, 720, 729, 749, 814, 841, 922, 976, 1054, 1078, 1085, 1096, 1099, 1100, 1113, 1150, 1151 and 1217; prototype numbers 4, 14, 24, 80, 202 and 244; oil soluble Color Index number 73, about 18 percent.
Maleic anhydride, 1½c. per lb.

which required the material for manufacture of phenylmethyl ethers and certain aldehyde fixatives.

The creosote inventory problem was expected to diminish on account of anticipated curtailment of imports from Europe. Trade sources expected the Europeans to burn considerable material as fuel.

Benzol remained notably strong. Imports of benzol might be affected in the long run by the Suez closing, some producers believed. Tankers were extremely tight, and freight rates on tankers were up slightly more than double in the past six or seven weeks.

Freight rates on dry cargo had about tripled in the same interval, and bottoms were in short supply generally. However, the situation was not expected to influence foreign trade in naphthalene materially.

October steel production topped 11 million tons, a figure never before reached for one month of steel output. A revised figure published by American Iron and Steel Institute put it at 11,048,513 tons.

The institute estimated that steel production in the week ended December 16 would amount to 102.0 percent of theoretical capacity, equivalent to 2,511,000 tons of steel. Output was 2,493,000 tons in the week previous, 2,466,000 tons in the comparable week in November and 2,421,000 tons in the corresponding week one year ago.

Basic Products

Benzol — Demand continued urgent. Heavy production, supplemented by substantial tonnage of imported material, was moving freely. Supplies were adequate. Prices were regarded as firm.

The long-term future of trade in imported material was clouded by a severe tanker shortage that has developed since the Suez Canal was blocked. Shipping circles reported that freight rates for shipment via tankers had slightly more than doubled in the past six or seven weeks. Especially tight were the smaller tankers, those, say, in the 2,500 to 3,500 ton range. Tankers ranging from 10,000 to 15,000 tons were somewhat more available but were also more costly than the smaller craft.

Creosote—Relief from the heavy inventory problem was expected as the acute fuel shortage in Europe makes its influence felt. Producers said it was likely that the Europeans will have to burn a lot of creosote as fuel and reduce correspondingly their export of material to this country. Imports had been coming into the domestic market lately at a rate of close to 40 million gallons per year.

Cresols—New production facilities for p-cresol were on stream. Their operation

Aromatic Chemicals Output: September

Following are statistics based on data compiled by the Tariff Commission relating to production of certain aromatic chemicals during September with corresponding figures for the month previous and cumulative totals for the calendar year. Figures representing cokeoven production of benzol, creosote oil, crude naphthalene and toluol are those previously published with other figures reported by the Bureau of Mines. Where no figure is given, it is because available data would have disclosed confidential information or because the data on hand were believed to be incomplete. Dyes are identified by color index or prototype number.

	September	*August*	*First Nine Months 1956*
Acetanilide ..... lbs.	377,875	114,860	1,313,939
Aniline ..... lbs.	9,360,473	7,284,921	93,545,371
Benzol, tar distillers..... gals.	2,003,385	2,793,775	21,638,500
Cokeoven operators..... gals.	15,080,753	12,624,974	127,595,492
Total from coal sources..... gals.	17,084,138	15,424,749	149,293,992
Petroleum operators..... gals.	10,339,638	8,796,137	82,608,517
Total from all sources..... gals.	27,423,776	24,220,886	231,902,509
Creosote oil (100 percent creosote basis)			
Tar distillers..... gals.	7,633,834	6,729,698	65,206,549
Cokeoven operators..... gals.	2,496,633	2,430,803	16,447,440
Total ..... gals.	10,130,467	9,159,901	81,653,989
Cresols, meta-para..... lbs.	1,128,841	932,310	10,986,232
Ortho-meta-para ..... lbs.	1,053,409	.....	5,737,358
Cresylic Acid, refined, all sources..... lbs.	4,842,443	4,742,758	43,833,853
Dyes, C. I. 202, chrome blue black R..... lbs.	119,036	66,226	329,350
C. I. 581, direct black EW..... lbs.	462,620	327,153	3,247,669
P. 302, naphthol AS..... lbs.	.....	42,557	607,316
Monochlorobenzene ..... lbs.	35,101,396	31,624,489	337,657,704
Naphthalene, crude, tar distillers..... lbs.	20,456,258	20,599,514	216,417,769
Cokeoven operators..... lbs.	18,870,451	13,266,029	129,128,676
Total crude..... lbs.	39,326,709	33,865,543	345,546,445
Refined, tar distillers..... lbs.	6,185,576	6,052,793	60,760,350
Phenol, tech. and USP, all sources..... lbs.	42,615,737	33,011,194	383,617,651
Phthalic Anhydride..... lbs.	22,690,005	24,142,752	236,356,214
Styrene, from all plants..... lbs.	93,056,571	90,882,026	813,226,059
Toluol, cokeoven operators..... gals.	3,151,838	2,601,060	26,930,991
From other sources ..... gals.	10,082,713	9,593,610	99,532,017
Total from all sources ..... gals.	13,234,551	12,194,670	126,463,008
Xylol, from all sources..... gals.	8,771,003	9,992,503	91,601,954

Coal Chemicals

was being accelerated rapidly last week toward rated capacity. In general, para production was now much heavier than it had been one or two months ago but was still running well behind demand. Producers said supply was gaining on demand at a fast pace, however, and might overtake it within the next 30 to 60 days.

The shortage was most acute with respect to demand for 2,6-di-tert-butyl-p-cresol. DBPC and 4-methyl-6-tert-butyl phenol led a number of antioxidants requiring p-cresol as a raw material and finding outlets in protection of rubber, transformer and circuit breaker oils, textile oils, edible fats and oils, fatty foods and, in animal and poultry feeds, the contained vitamins and essential nutrients.

A second very substantial market was provided by the essential oils industry, which was consuming p-cresol for manufacture of phenylmethyl ethers and certain aldehyde fixatives. An important outlet was manufacture of anisaldehyde, which, in turn, was used in perfumes, flavors and manufacture of antihistamine drugs and several azo-type dyes.

Para was in demand for manufacture of diverse chemical intermediates, chiefly m-nitro-p-cresol. Other important ones were 2-nitro-4-methylaniline (used to make toluidine reds and hansa yellows) and 3-amino-4-methyl phenol (required for manufacture of rhodamine 3GO). Para was moving also into manufacture of fast black G salt, ranidogen red violet 2R and naphthol AS-L3G.

Another source of the heavy demand was for use in bactericides.

p-Cresol was sold in good volume to resins manufacturers for making oil-soluble resins used in baking enamels and chemical resistant coatings and permanently fusible resins of the novolak type used in air-drying varnishes and in use in combination with other resins, such as ester gum, nitrocellulose and cellulose acetate.

In general, para was in demand for use in soaps, plastics and wax paper-coating baths, for prevention of decomposition or catalytic effects due to peroxides, as an antiskinning agent in paints, as a desensitizing agent in photography and for stabilization of pharmaceuticals, cellulose solutions and certain chemical intermediates.

Demand was sustaining a healthy market for ortho and meta-para, but the extremely tight supply situation that governed trade in these fractions some months ago was no longer in evidence. Material was no longer moved on the basis of allocations. Producers reported that they had to do some selling now, yet were able to move all output without great difficulty.

The current market balance, except for the tight situation with respect to the para, was described as ideal.

Intermediates

Phthalic Anhydride—The position remained unchanged last week. Consumers were getting along on stocks brought in previous to the October 15 price advance. Producers thought these would suffice through December 31, permitting consumers to show curtailed inventories on tax reports. The trade was banking on a strong resurgence of trade at the outset of the new year on the theory that consumers' stocks would be nearly depleted by that time.

Dyes

Contract price increases averaging about 18 percent were announced last week effective January 1 on an additional 129 textile dyes, including 14 listed in OPD current price quotations. Along with similar increases announced only two weeks earlier, the number of textile dyes now due to rise January 1 was brought to 496, including 67 listed in the OPD price list.

Cited as factors in the advance on occasion of the previous announcement were nearly every cost item going into manufacture and delivery, specifically raw materials, labor, research and technical services.

Additional to the 53 price increase previously listed in OPD (Dec. 3, 1956) the following textile dyes regularly quoted in OPD, identified by Color Index or prototype number, were due to advance January 1 as follows:

No.	Dye	Contract Prices Per Pound Current	Jan. 1
179	Rubine XX, conc.	$1.25	$1.48
180	Blue F4B	1.11	1.31
208	Fast blue SR	1.10	1.30
289	Navy blue 3R, conc.	1.44	1.70
299	Black F, conc.	1.86	2.19
304	Neutral black 2B, conc.	2.21	2.61
419	Red FC	1.23	1.45
561	Brown B	2.45	2.89
720	Brilliant blue BBG	2.07	2.44
729	Blue B, extra conc.	3.06	3.61
p-24	Gray L	1.76	2.08
p-80	Diazo brilliant scarlet ROAD	3.07	3.62
p-202	Diazo black VJ, conc.	2.10	2.48
p-244	Brilliant scarlet BN	1.44	1.70

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending Dec. 16 was as follows:—

Ammonia liquor	lbs.	977,115
Ammonium sulfate	lbs.	41,606,184
Benzol	gals.	3,719,341
Coaltar	gals.	18,281,505
Creosote	gals.	709,196
Naphthalene, crude	lbs.	3,955,739
Pyridine	lbs.	14,184
Toluol	gals.	819,516
Xylol	gals.	236,399

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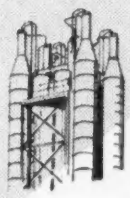

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Enjay Appoints Eastern, Akron, Ohio, District Mgrs.

Enjay Company, New York, has announced the appointment of J. P. Haworth as manager of the company's newly-established eastern sales division.

Enjay at the same time announced that H. C. Evans, who opened the company's Akron, Ohio, offices last year, has been designated Akron district manager.

Mr. Haworth will be responsible for the operations of the company's field sales personnel in a nineteen-state area—including New England, the Eastern seaboard states, West Virginia, Ohio and Michigan.

He joined Enjay early in 1955, after fifteen years with the Esso Rerearch and Engineering Company, and most recently has been assistant sales manager of Enjay's butyl division.

Mr. Evans, who will report to Mr. Haworth, will be responsible for Enjay sales activities in Ohio and adjacent territories in Michigan, western New York, western Pennsylvania and West Virginia.

MCA Asks More

—Continued from page 3

the matter should be made a specific requirement in the act.

• The yardstick for ascertaining foreign market value should be stated in more comprehensive terms. It should not be possible for foreign producers and exporters to nullify the operation of the law by pricing and restrictive devices of any nature which might have the effect of eliminating a foreign market value determined under fully competitive conditions and thereby eliminating one of the elements determinative of dumping.

• Where an attempt is made to justify prices on goods exported to the United States lower than the prevailing prices in the country of origin, on grounds of larger quantities, the burden of proof to justify such price differential should be placed on the exporter or importer as the case may be.

• In the determination of injury to domestic interests, the same realistic rule of segmentation which is now incorporated in section 5 of the trade agreement extension act of 1955 should be expressly applicable to the antidumping act. Injury should properly be found if the particular product or branch of operations of the domestic producer is injured, without regard to the profitableness of other products or other branches of operations of the producer.

• A definition of the "such or similar" foreign merchandise, which is to be compared with the merchandise under consideration in determining the fact of dumping, should be stated in the act.

The definition in section 402(f) (4) of the tariff act (added by section 2 of the customs simplification act of 1956) is deficient as respects the chemical industry, in relation to the problem of dumping, particularly in placing primary emphasis on "physical characteristics" of the merchandise.

As a result of administrative practice and judicial decisions it is relatively easy for the foreign exporter to avoid the finding of dumping by making relatively minor changes in quality, grade or component materials either in the product as sold in the home market or for export.

Also, changes of label are sufficient to eliminate articles from consideration on the basis that the actual value is thereby affected. Provision should be made by way of a definition which would require that such devices or conditions, regardless of the reasons for their being, would not operate to permit the foreign producer or exporter to avoid legally a finding of dumping when the exported product is sold at less than its fair value in the home market or in the export market.

Shulton Develops Process

—Continued from page 5

ness of "Sesoxane" against flies and mosquitoes and its interesting possibilities as an effective insecticide synergist for cockroaches and other insects. A comprehensive report describing the effectiveness of "Sesoxane" was presented by J. H. Fales of the entomology research branch, Agriculture Research Service, USDA, Beltsville, at the recent annual meeting of the Chemical Specialties Manufacturers Association in Washington, D. C.

Because of its solubility in kerosene, "Freon 11," "Freon 12" and other solvents, "Sesoxane" is reportedly easy to formulate in conventional equipment. It has a faint, pleasant odor and the low acute oral toxicity (LD_{50}) of 2,000 milligrams per kilogram in rats. Complete toxicological studies are in progress and numerous formulations are currently being prepared and evaluated for registration with the Department of Agriculture.

Shulton's fine chemicals division produces, among other fine chemicals, "Piperonal" (heliotropine), which is the basic chemical required for the manufacture of "Sesoxane." One key to this product is its characteristic dioxymethylene bridge. "Piperonal" is a white crystalline material with a floral odor, widely used in soaps, perfumes, toilerties and cosmetics.

Nitrogen Cutback

—Continued from page 3

went up markedly (some 35,000 metric tons) during the year. This rise it attributes mainly to stepped-up usage of fertilizers on grasslands. Since production has not gone up as much and since the increase in domestic consumption is likely to continue, it expects British nitrogen exports for 1956-57 to be small.

"In Poland," the report continues, "consumption has increased by about 60,000 tons, in France by 25,000 tons, in Western Germany by 25,000 tons and in Yugoslavia by 25,000 tons over 1954-55. In the rest of Europe consumption has changed very little from the previous year."

US consumption of nitrogen for agriculture, the brokerage house says, was some 150,000 metric tons more than it estimated in its half-yearly report (OPD, 5/28/56). However, it adds, "for industry our estimate was probably 100,000 tons too high for both 1954-55 and 1955-56, owing to purchases by the government being considerably less than we had estimated. The final figures for 1955-56 therefore showed an overall increase in consumption of about 4 percent over our reduced figure for 1954-55."

US production has been cut back sharply, Aikman asserts, because many of the inland plants have been unable to sell their full capacity locally and distance from the coast makes the export market impossible.

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ASSISTANT SALES CHIEF: Raymond J. Fallon, appointed assistant sales manager of Metalsalts Corporation, Hawthorne, N. J.

ACS Division Leaders Elected for Coming Year

Dr. Sherman S. Schaffer, staff associate in the technical and research divisions of Humble Oil & Refining Company, Baytown, Tex., has been elected chairman of the American Chemical Society's division of petroleum chemistry for 1957, succeeding Dr. Alex G. Oblad.

Dr. Albert C. Zettlemoyer, professor of physical chemistry at Lehigh University, has been elected 1957 chairman of the division of colloid chemistry, succeeding Dr. Ralph A. Beebe, of Amherst College.

Dr. Carl M. Conrad, of the southern regional research laboratory of the Agricultural Research Service, New Orleans, La., has been elected chairman of the division of cellulose chemistry for 1957, replacing Reid L. Mitchell, of Rayonier, Inc., Shelton, Wash.

Dr. John D. Roberts, professor of organic chemistry at the California Institute of Technology, has been elected chairman of the division of organic chemistry, succeeding Prof. Nelson J. Leonard, of the University of Illinois.

J. Kenneth Carver of the Dayton, Ohio, central research laboratory of Monsanto Chemical Company, has been elected chairman of the division of paint, plastics and the printing industry, succeeding Dr. Russell B. Akin, of E. I. duPont de Nemours & Co., Wilmington, Del.

Health Organizations to Hold March Meetings in Cincinnati

Theme of the 1957 National Health Forum will be "Better Mental Health—Challenge to All Health Services," according to Dr. Francis J. Braceland, chairman of the committee planning the program for the forum, to be held March 20 through 22 in Cincinnati, Ohio, at the Hilton Plaza Hotel.

The forum will seek to outline what is now known about how to foster mental health, and to encourage more effective use of that knowledge.

The National Advisory Committee on Local Health Departments will consider what might be called the birth, care, and growth of local official health services at its ninth annual meeting, to be held March 19 in Cincinnati.

"The terminology indicates the closeness of these basic health services to the people, and the need continuously to revitalize and strengthen them," according to Sherwood A. Messner, committee chairman, in announcing the meeting.

SPI 1957 Annual Parley To Be Held in Los Angeles

The 1957 Society of the Plastics Industry annual national conference will be held March 18 through 21 at the Biltmore hotel, Los Angeles.

The Pacific coast plastics exposition, which is a regional trade show held in conjunction with the conference, will be at the Shrine Exposition Hall in Los Angeles.

Biltmore sessions of the conference will cover plastics in the field of electronics, aircraft and defense, packaging, building materials, appliances, and also sheet forming and cellular plastics in addition to latest developments for processes and processing.

Peanut Quota Approved

Department of Agriculture announced last week that peanut growers have approved the use of marketing quotas for the peanut crops to be produced in 1957 through 1959. In the unofficial tabulation of the votes in the December 11 referendum, 93.6 percent of the growers approved the continuation of quotas for another three-year period. Quotas have been in effect on peanuts since 1949.

Profit Will Be Theme Of Maintenance Show

"Good Maintenance or Bad—The Difference Is Profit" has been selected as the 1957 theme of the Plant Maintenance and Engineer Show.

The show, and the concurrent conference, both in their eighth year, will be held in Cleveland, Ohio, at the Public Auditorium, January 28 to 31, inclusive.

The number of companies participating and the space used for exhibits will soar to record heights, it is expected. Almost 95 percent of the available exhibit space already has been assigned. All the exhibit areas in the Public Auditorium will be used.

The number of companies is expected to exceed 400 and the net space used, exclusive of aisles, will be over 100,000 square feet. About 5,000 pieces of equipment and accessory products, in some 278 categories, will be displayed.

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Textile, Leather Chemicals

Moderate volume trading in textile and leather chemicals took place last week, for prompt needs, while active consuming interest continued for early next year requirements. Firm tone prevailed in the market. Quotations were well held at current levels for the entire list. In the chemical group current prices were maintained for next year delivery, except zinc hydrosulfite which was advanced one half cent to 2 cents per pound as to quantity, effective January 1. Potato starch was unchanged and firm for spot and later delivery. Interest in tapioca flour was restricted to Siamese grades, due to the high cost of Brazilian. Offers for shipment from Brazil continued scarce and the market was entirely nominal.

Higher cost of ocean freight rates has created a firmer tone in tanning material replacements. Freight rates from France and Italy were raised 10 percent, while rates from Far Eastern points were scheduled to increase 15 percent effective February 1.

Rayon and acetate filament yarn, staple and tow shipments in November totaled 98,200,000 pounds, according to Textile Economics Bureau. These shipments were only 3½ percent under the 102,000,000 pounds shipped in October, and 8½ percent below 107,300,000 pounds, November, 1955. November shipments comprised 96,900,000 pounds for domestic markets and 1,300,000 pounds for export.

January 1 Price Advances
Zinc hydrosulfite, ½c. per lb. carlots, 2c. per lb., l.c.l.

Stocks of rayon and acetate yarn and staple in the hands of producers at the end of November totaled 106,400,000 pounds, a decrease of 2,800,000 pounds from October. It was noted also that November marked the fourth consecutive month of stock declines.

The annual review of the world wool situation by the Bureau indicates that global output of wool is expected to increase for the ninth consecutive season to the 1956-1957 level of 4,865,000,000 pounds (greasy basis). The estimated clean equivalent yield is placed at 2,802,000,000 pounds, comprising 2,265,000,000 pounds of apparel wool and 537,000,000 pounds of carpet wool.

Chemicals

Bichromates—Firm tone prevailed in this market. Inquiry was quite active for early next year replacements. Prices were maintained at former levels.

Sodium Acetate — Buying interest was chiefly for actual needs. Prices were maintained at former levels.

Sodium Hydrosulfite—Demand was restricted to actual needs. Prices were without change and firm.

Sizing Materials

Corn Dextrin—This market remained unchanged and steady. Moderate demand was noted for actual needs. Gum was quoted at $9.28 per 100 pounds, paper bags, carlots, New York delivery; light canary, $9.02; dark canary, $9.12, and white, $8.86, same basis. Smaller lots were 15c. per 100 pounds higher.

Corn Starch—New business was light and spotty, while deliveries against orders continued to move in good volume. Prices remained steady. Pearl was quoted at $7.27 per 100 pounds, paper bags, carlots, New York, and powder $7.39, same basis. Less carlots were 15c. per 100 pounds higher.

Egg Albumin—This market was without change and steady. Demand was moderate and confined to actual needs. Flake was held at $1.65 to $1.67 per pound, and powder, $1.69 to $1.71, spot, as to quantity. Technical was firmly held at $1.08 to $1.10 per pound, same basis.

Egg Yolk—Business was reported spotty. Prices were unchanged and firm, ranging from $1.07 to $1.09 per pound, spot, depending upon quantity and seller.

Potato Starch—Trading was reported moderate, for prompt and later delivery. Producers restricted offers to prompt shipment were not inclined to offer freely for future delivery. Carlots were held at 6¼c. per pound, f.o.b. mills and 6c. for delivery south of Virginia. Idaho starch was unchanged at 6¼c. carlots, f.o.b. mills and 5½c. for delivery to eastern points. On spot, quotations ranged from 8¼c. to 9¼c. per pound, exwarehouse, as to quantity.

Price Trends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(1926-1949 average)

Last week	Prev. week	Last month	Dec. 16, 1955
108.55	108.55	108.55	105.37

For Current Prices see Page 9

Tapioca Flour—While trading was limited, arrivals against former contracts were readily absorbed. Offers of medium grades of Siamese ranged from 5¼c. to 5.35c. per pound, carlots, exdock, prompt shipment, according to grade. Grade A was quoted at 5.65c. per pound, and triple A at 6½c. to 6.60 per pound, same basis. High grade Brazilain was quiet and nominal at 9½c. to 10c. per pound, carlots, exdock, prompt shipment.

Tanning Materials

Canadian leather footwear production in August, 1956, increased by 1,450,368 pairs over the amount produced in July and by 432,578 pairs over the August, 1955, output. Production amounted to 3,859,911 pairs in August, while in July it was 2,409,543 pairs and 3,427,333 pairs in August, 1955.

For the 8 months ended August 31, leather footwear production totaled 28,404,525 pairs, compared with 25,248,208 pairs in the corresponding period of 1955. Footwear produced having leather soles amounted to 1,604,489 pairs in August and 10,798,587 pairs for the 8 month period.

Chestnut Extract—Trading was moderate chiefly for nearby shipment. Ocean freight rates were increased 10 percent for shipment from France and Italy. Replacements were steady and unchanged. Solid extract guaranteed 60 percent was quoted at 9⅛c. per pound, carlots, exdock, plus duty, prompt shipment and powdered, 70 percent, 10⅝c., same basis.

Cutch—Market remained strong reflecting sold up production. Shipments was maintained at 8½c. per pound, carlots, exdock.

Mangrove Bark—Trading was reported quiet. Primary markets were unchanged and steady. African bark was quoted at $66 per ton, exdock, prompt shipment; Colombian, $58 per ton, and Ecuadorian, $55, same basis.

Myrobalans—Ocean freight rates were lifted 15 percent, effective February 1 for replacements. Buying interest was limited to prompt shipment. Primary market remained unchanged and steady. Genuine J1 was maintained at $63 to $64 per ton, exdock, prompt shipment; crushed, $79 to $80 per ton and Bombay, $61 to $62, same basis.

Quebracho Extract—Market remained steady at prevailing quotations. Trading was reported for moderate quantities for prompt shipment. Solid ordinary guaranteed 63 percent tannin was quoted at 11 21/32c. per pound, exdock, plus duty and clarified 64 percent 12 23/64c., same basis.

Valonia—Replacements continued firm reflecting the increased cost of ocean freight rates. Primary market remained unchanged. Beards were quoted at $86 per ton, carlots, exdock; cups, $64 per ton, same basis, and extract, 9¾c. per pound, exdock, plus duty.

Wattle—Consumer interest was spotty and confined to nearby shipment. All grades were maintained at former levels. Fair average bark quoted at $95 to $96 per ton, exdock, prompt shipment and merchantable at $91 to $92. East African extract was unchanged at 9¾c., and South African 10c. per pound, carlots, exdock, plus duty.

Drugs, Fine Chemicals

Major producers last week announced price increases on sodium and potassium hydroxides, NF and CP grades, amounting to 5 cents per pound. It was said that the increases were due primarily to gradually accumulated costs of production which could no longer be absorbed. Technical grades were unaffected. The increases followed in the wake of advances noted during the past two months on items which have been unchanged in price for some time. A general upward trend was expected to continue in fine chemicals although it was indicated that adjustments being made had long been overdue.

Price Trends

Advanced

Potassium hydroxide, USP, 5c. per lb.
Sodium hydroxide, USP, 5c. per lb.

Reduced

None.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Dec. 16, 1955
65.27	65.26	65.23	66.41

For Current Prices see Page **9**

Medicinal alkaloids were unchanged. Scopolamine, which had been in somewhat tight supply over recent months, was reported adequate again and spot demands were being met promptly. A raw materials shortage was said to have caused the scarcity. Moderate demands were noted for cinchona alkaloids and prices were unchanged from those previously reported. It was said that conditions in this market would probably remain static over the early months of next year.

Aspirin makers reported a continuing trend toward bulk purchases from makers of analgesic compounds and pharmaceutical preparations designed for use during the winter cold season. It was anticipated that business could be expected to continue good into 1957. Prices were firmly quoted and no change anticipated at the present time.

Hormones were reported in good demand for use in geriatric formulations which have received much increased attention during the past five years. It was pointed out that in many instances much research work remains to be done in areas concerned with the physiological and psychological action of hormones in the human body. Many hormones which have proved clinically valuable, it was said, have to be investigated more thoroughly in order that they may be made commercially available and put to proper use.

Vitamins and antibiotics were strong and trade sources anticipated an even bigger year this year than last. Vitamins topped the list of medical sales last year totaling some $303 million. Domestic markets were reported firm in price structure and stocks were reported quite adequate on most items with production facilities sometimes taxed to capacity in order to keep pace with consumer demands.

Acid Benzoic—USP benzoic acid in hundred pound lots or more was available priced at 54c. per pound. Technical grades, same quantity, were reported at 44c. per pound. Supplies were said to be quite adequate to handle the current requirements of the trade and sales were steady at a moderate volume. Major producers noted steady consuming interest for this item and prices were reportedly firm. As a standard antiseptic, benzoic acid continued to find good use.

Acid Glutamic—One hundred pound lots of 1-glutamic acid, 99.5 percent, were available last week priced at $2 per pound. Sales were reported by producers as being steady at a moderate volume. Stocks were said to be plentiful and facilities well able to keep pace with requirements in the trade. Prices have been unchanged in over a year.

Acid Hydriodic—Prices were unchanged both for material of 1.50 specific gravity and 1.70 specific gravity. The former was priced at $2.94 per pound while the latter material in carboys was reported at $3.23. Supplies were said to be quite plentiful and demands routine. This item finds principal use in analytic laboratory procedures. Conditions have been substantially the same in this market for some time.

Acid Tannic—NF fluffy in 1,000 pound lots was priced at $2.05 while smaller quantities were reported ranging in price from $2.06 to $2.10. Supplies were said to be quite plentiful and it was indicated that demand had been routine and would contnue so. Technical tannic acid has been used in the manufacture of gallic acid and pyrogallol. Medicinally, a 1 to 20 percent solution of NF material has been used as an astringent.

Alkaloids—Market conditions in recent weeks have been substantially unchanged. It was pointed out that the production and sale of alkaloid medicinals, under normal conditions, is maintained at relatively constant levels. Dealers continued to report moderate demands for cinchona alkaloids and salts. Moderate interest was noted in quinidine sulfate as used traditionally with digitalis. Atropine alkaloid and sulfate prices were unchanged. A raw materials shortage on scopolamine was said to have been relieved and trade sources revealed that supplies were again adequate to cover the needs of the trade.

Aspirin—Manufacturers reported sales of acetylsalicylic acid were moving along well at a seasonally advanced level. It was pointed out that a major producer had recently announced the production of its hundred millionth pound of aspirin. It was also noted that aspirin ranked third in medical sales last year while cold remedies were second. Trade sources generally reported that this year's business could be compared favorably with last year. Supplies were said to be plentiful and production facilities were well able to keep pace with the considerable demands being made by makers of analgesic compounds and pharmaceutical preparations designed for the treatment of the common cold.

Ammonium Bromide — NF ammonium bromide, granular, was unchanged in price. Producers reported barrel quantities available at 43c. per pound. Consumer interest was routine and supplies were quite plentiful. This item continues to find use as a medicinal sedative and technical grades were said to be used in the printing and photographic industries. The market was quiet and producers expected no changes in the near future.

Barbital—Dealers reported inquiry was routine for barbital and sodium barbital, NF. Supplies were plentiful and moving in moderate business volume. It was noted that these items have been included in the National Formulary issued last year after having been deleted from USP XV. Products marketed now are generally signified "NF."

Caffeine—Prices were unchanged but competition was keen between importers and dealers in the domestic market. Citrated caffeine ranged from $2.70 to $2.80. The inside price was indicated for material in 100 pound drums. Natural and synthetic anhydrous, was reported at $3 while hydrous was priced 20c. less per pound. Demands were substantial from makers of analgesic compounds to be used in cold remedies. Supplies were said to be quite adequate in the face of consuming demand for all grades.

Creosotes—Prices were reported unchanged. NF hardwood creosote, in carboys was priced at $1.30 while beechwood was 30c. higher per pound. Inquiry was routine and supplies were reported quite adequate. It was said that wood creosotes have been used steadily in recent years as antiseptics by veterinaries in the treatment of minor wounds in horses and cattle. Prices have been substantially unchanged for some time.

Hormones—Items of commercial importance were unchanged in price from last reports. Hundred gram lots of testosterone were reported at 70c. while the same quaitities of methyl testosterone and testosterone proprionate were selling for 68c. per gram. Pregnenolone in hundred gram lots was quoted at 45c. while the acetate was 5c. less per gram. Progesterone was 50c. and the acetate 70c. per gram. Producers reported business as seasonally good and noted the increased attention being paid by researchers into the use of hormone additives in geriatric prepara-

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Drugs, Fine Chemicals

tions. Supplies were adequate and demands were promptly met.

Iodine—Crude prices were firmly quoted at $1.10 per pound. Steady consumer interest was noted and trade sources pointed out that, from an overall standpoint, conditions in this market vary little from month to month.

Potassium Hydroxide—An increase of 5c. per pound was instituted last week by major producers on USP pellets. Material in 100 pound drums was priced at 33½c. Less quantities were quoted up to 38c. per pound. Advances were attributed to increased costs which manufacturers have been unable to absorb any longer. Supplies were in good order and production facilities were said to be well able to handle the current requirements of the trade.

Propyl Gallate—Inquiry continued routine on this item and prices were unchanged. Propyl gallate in quantities ranging from 100 pounds to one ton was available at prices from $3.90 to $4.40 depending on quantity and seller. Prices have been substantially unchanged in this market for some time.

Sodium Glutamate—Monobasic sodium glutamate prices have been unchanged since July of 1955. Currently, 100 pound lots in fiber drums are priced at $1.20 per pound. Supplies were reported quite adequate and producers were well able to fill the moderate demands being made by the trade at this time.

Sodium Hydroxide—Major producers, last week, announced increases on NF pellets of 5c. per pound. Stocks were adequate and demands were said to be normal. It was suggested that advances were due to accumulated increases in the costs of production which could no longer be absorbed. The new price is 23½c. per pound for 100 pounds in drums. Prices for less quantities range to 28c.

Vitamins—Producers indicated little change in the general vitamin picture. Materials were moving to consumers in good volume and at a rapid pace. B-complex vitamins were said to be in good demand for preparations which find increased use during the winter months. Ascorbic acid was being shipped for a wide

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Drugs, Fine Chemicals

variety of uses. Prominent among consumers of vitamin C were the frozen foods manufacturers and makers of citrus bioflavonoid products. It was anticipated that the close of this year might mark a new high in vitamin sales. Last year's record sales totaled over 300 million.

Botanicals

Dealers in water soluble gum products last week continued to report shortages on such items as locust bean gum and tragacanth gum. There was said to be increased activity in the spot market for arabic, but trade sources indicated that futures from the Sudan would probably not be effected. The immediate problem was in orders which have to be filled in the next thirty to sixty days.

Botanical dealers reported they had suffered only minor inconveniences during the dock strike. One source, however, was apprehensive that dock conditions might become worse in the early months of next year when the current non-strike injunction runs out. At that time botanicals buying and marketing may be expected to be at a higher level than at present. Further increases in freight rates were a distinct possibility it was said.

Moderate consumer interest was noted in most botanical drug markets. Shortages were acute on several drugs, which have been previously noted many times. These included cascara bark and goldenseal root.

Arabic Gum—Increased activity in spot buying was said to be a predominating factor in this market last week. Quotations on futures from the Sudan were not expected to be effected, but prices on material for delivery in the next thirty to sixty days were strong at 20c. to 22c. for amber sorts and 26c. to 28c. for USP powder. The situation was said to have come about since shipping schedules have been somewhat curtailed as a result of the Middle East crisis. One dealer expressed the feeling that offerings could become quite limited in view of the fact that consumers are reportedly buying at an increased rate in a between crops period.

Locust Bean Gum—The majority of trade sources continued to report a tight supply situation for this item. Dealers information was that material being offered in February would be limited, high priced and of doubtful quality. Prices were quoted ranging from 48c. to 50c. Consumer activity was said to be moderate and expected to be increased when more was known about the February crop.

Tragacanth Gum—Dealers continued to report generally that supplies on this item were very tight. Demands were at a moderate pace in a normally slow gum season.

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In the grade to meet your specific nutritional and pharmaceutical requirements

LAKE STATES
...America's Pioneer Producer of TORULA (U.S.P.)

LAKE STATES invites you to consider the many advantages of dried torula yeast, U.S.P. as a protein supplement, rich in amino acids, vitamin B complex and minerals.

Grown in sterile media, it is carefully controlled for uniformity and is bland, pleasant tasting for easier blending. LAKE STATES has longer shelf life and is economical.

For Complete Information and Samples write to
Lake States Yeast Corporation
Rhinelander, Wisconsin

500 5th Avenue, New York 36, N.Y.
or
Charles Bowman and Company
220 E. 42nd St., New York 17, N.Y.

Lake States
Lake States Yeast Corporation • Rhinelander, Wisconsin
Subsidiary of Rhinelander Paper Company

IMPORTS at United States Ports

New York

ABSYNTH HERB—58 bls, S B Penick & Co, Rijeka
AGAR—60 dms, Uni Gum Corp, Casablanca
50 bls, Meer Corp, Nagoya
ALGINATE—60 dms, Fried & Co, Havre
ALOE—74 cs, Selma Mercantile Corp, Willemstad
ALUM—300 bgs, C M C Chemicals Inc, Liverpool
ALUMINUM SULFIDE—1 dm, Chemimpex, Bremen
ANILINE DYES—14 dms, Heemsoth Kerner, Liverpool
15 dms, Sandoz Chemical Works, Hamburg
2 dms, Geigy Chemical Corp, Hamburg
17 cks, Van Oppen & Co, Havre
19 dms, C A Haynes, Hamburg
244 dms, Hensel Bruckmann & Lorbacher, Hamburg
2 dms, Hensel Bruckmann & Lorbacher, Bremen
ANISE SEED—200 bgs, Valencia
ANTIMONY OXIDE—102 bgs, Hamburg
REGULUS—95 cs, Cosmos Shipping Co, Trieste
ARGOL—400 bgs, Tartaric Raw Materials, Buenos Aires
500 bgs, Tartaric Raw Materials, Naples
ARSENIC, METALLIC—31 dms, Belmont Smelting & Refining Co, Gothenburg
ASCORBIC ACID—20 dms, Mitsubishi International Corp, Yokohama
BARBASCO POWDER—8,000 bgs, Astoria Panamericana, Iquitos
ROOT—113 bgs, Gillespie & Co, Callao
BAYBERRY WAX—100 bgs, Strohmeyer & Arpe, Buenaventura
BEEF EXTRACT—300 cs, International Packers Ltd, Buenos Aires
BEESWAX—50 bgs, Marcel Calvet, Ciudad Trujillo
35 bgs, Cornelius Wax Refining, Puerto Plata
99 blks, Strahl & Pitsch, Assab
140 blks, Mercantile Metal & Ore Corp, Assab
80 bgs, Tampico
BELLADONA LEAVES—100 bls, Meer Corp, Rijeka
74 bls, S B Penick & Co, Rijeka
BENZOIN GUM—41 cs, Meer Corp, Singapore
BILE ACIDS—19 dms, Merck & Co, Buenos Aires
BLEACHING CLAY—58 bgs, Impex Overseas Corp, Rijeka
BOIS DE ROSE OIL—5 dms, Kline & Co, Iquitos
18 dms, Ungerer & Co, Iquitos
2 dms, S Arbib & Co, Iquitos
10 dms, Dodge & Olcott, Iquitos
6 dms, Simab Corp, Iquitos
2 dms, Hecht Levis & Kahn, Iquitos
BRUCINE ALKALOID—2 cs, Frank Samuel & Co, Southampton
SULFATE—10 cs, Frank Samuel & Co, Southampton
BURDOCK ROOT—38 bls, S B Penick & Co, Rijeka
CADMIUM—220 cs, Indussa Corp, Antwerp
221 cs, W R Grace & Co, Genoa
CALCIUM PHOSPHATE, DIBASIC — 1,000 bgs, Wessel Duval & Co, Antwerp
TARTARIC—1,899 bgs, Irving Trust Co, Buenos Aires
1,023 bgs, H Elkan & Co, Buenos Aires
CAMPHOR OIL—10 dms, Lo Curto & Funk, Kobe
CANDELILLA WAX—600 bgs, Tampico
CARAWAY SEED—200 bgs, Levy & Levis Co, Rotterdam
CARDAMOM—22 cs, Wm E Martin & Sons, Colombo
11 cs, Knickerbocker Mills, Colombo
CARNAUBA WAX—445 bgs, Bankers Trust Co, Areia Branca
67 bgs, Mercantile Metal & Ore Corp, Fortaleza
424 bgs, Biddle Sawyer Corp, Tutoia
225 bgs, Wm Diehl & Co, Tutoia
188 bgs, Bank of London & S A, Tutoia
449 bgs, F Henjes, Tutoia
375 bgs, Balfour Guthrie, Tutoia
33 bgs, Cornelius Wax Refining, Tutoia
CAROB—200 cs, A J Trucco, Naples
25 cs, A L Bazzini & Co, Naples
125 cs, Levy & Levis Co, Naples
126 bgs, Prentiss Drug & Chemical Co, Piraeus
CAROTENE CONCENTRATE—1 ck, Havre
CASEIN—1,000 bgs, Tupman Thurlow, Buenos Aires
1,610 bgs, Eugenio Lang, Buenos Aires
400 bgs, P A Dunkel, Buenos Aires
880 bgs, Buenos Aires
500 bgs, Beham Import Corp, Buenos Aires
CASSIA—183 bls, P H Petry, Rotterdam
CASTOR BEANS—1,162 bgs, Hollander Trading Corp, Port Au Prince
116 bgs, Hollander Trading Corp, Cap Haitien
91 bgs, Hollander Trading Corp, Jeremie
192 bgs, Hollander Trading Corp, Gonaives
588 bgs, Hollander Trading Corp, Port de Paix
OIL—397 tons, Recife
CELERY SEED—71 bgs, A G Dunn, Marseille
CHESTNUT EXTRACT—405 bgs, Barkey Importing Co, Naples
2,000 bgs, Bordeaux
CHLORINATED RUBBER—300 bgs, C M C Chemicals Inc, Liverpool
CINNAMON QUILLS—100 bls, Louis Furth, Colombo
CITRONELLA OIL—25 dms, L Curto & Funk, Hong Kong
20 dms, Melanol Corp, Hong Kong
25 dms, Consumers Import Co, Honk Kong
45 dms, George Uhe Co, Hong Kong
40 dms, Ludwig Mueller, Hong Kong
75 dms, Dodge & Olcott, Hong Kong
CLOVE—350 bgs, G M Fakra, Tamatave
OIL—9 dms, Centflor Manufacturing Co, Tamatave
5 dms, George Lueders & Co, Tamatave
98 dms, Lo Curto & Funk, Tamatave
10 dms, Givaudan Corp, Tamatave
490 dms, G M Fakra, Tamatave
COALTAR DYES—9 dms, Hensel Bruckmann & Lorbacher, Hamburg
11 dms, Hensel Bruckmann & Lorbacher, Rotterdam
COCONUT OIL—370 tons, Manila
CODLIVER OIL—300 dms, Peder Devold Oil Co, Bergen
COLCHICUM ROOT—40 bgs, Produce Brokers New Co, Rijeka
54 bls, Dubrovnik
SEED—42 bgs, S B Penick & Co, Dubrovnik
60 bls, S B Penick & Co, Rijeka
COPAL GUM—834 bgs, Archer Daniels Midland Co, Matadi
250 bgs, O G Innes Corp, Matadi
340 bkts, O G Innes Corp, Macassar
43 bkts, Wm H Scheel, Macassar
26 bgs, France Campbell & Darling, Manila
600 bgs, S Winterbourne & Co, Manila
COPPER OXYCHLORIDE—100 bgs, Riches Nelson, Antwerp
COPPERAS—73 kgs, J. D. Smith Interocean, Liverpool
CORIANDER SEED—600 bgs, Wm E Martin & Sons, Casablanca
500 bgs, M J Golombeck, Casablanca
300 bgs, Levy & Levis Co, Casablanca
CREAM OF TARTAR—100 bbls, Barcelona
CRESYLIC ACID—1 dm, Eastman Kodak Co, Manchester
1,411 dms, H A Gogarty, Liverpool
CUBE POWDER—262 bgs, Foreign Domestic Distributors, Callao
ROOT—1,571 bls, Hecht Levis & Kahn, Iquitos
117 bgs, Hecht Levis & Kahn, Iquitos
CUMIN SEED—300 bgs, Khorramshahr
CURARE—5 cs, Abbott Lab, Santos
CUTTLEFISH BONE—25 cs, T F Riddle & Co, Kobe
110 cs, Guaranty Trust Co, Kobe
150 cs, Guaranty Trust Co, Nagoya
300 cs, Guaranty Trust Co, Venice
100 cs, Guaranty Trust Co, Portimao
240 cs, La Coulette
100 cs, Lisbon
70 cs, Bordeaux
DAMMAR GUM—140 bgs, O G Innes Corp, Singapore
50 bgs, O G Innes Corp, Tandjong Priok
140 bgs, S Winterbourne & Co, London
DINA ACID—9 dms, Hensel Bruckmann & Lorbacher Bremen
DRAGON'S BLOOD—9 cs, Singapore
EARTH COLORS—50 cks, Adelphi Paint & Color Works, Rotterdam
EUCALYPTUS OIL—33 dms, Seville
FARFARA LEAVES—10 bls, Herbarium Inc, Dubrovnik
16 bbls, S B Penick & Co, Rijeka
FARINA STARCH—896 bgs, Blaser & Mericle, London
FATTY ACID—63 dms, Fallek Products Co, Hamburg
6 cans, Little Falls Grinding Co, Hamburg
FENNEL SEED—182 bgs, Rijeka
FENUGREEK SEED—111 bgs, Prentiss Drug & Chemical Co, Casablanca
125 bgs, Wm E Martin & Sons, Casablanca
FISH OIL—27 dms, Arista Oil Products Co, Bergen
FISHLIVER OIL—8 dms, Wilbur Ellis Co, Yokohama
5 dms, Arista Oil Products Co, Yokohama
FUEL OIL—403,586 bbls, Esso Standard Oil Co, Las Piedras
122,261 bbls, Asiatic Petroleum Corp, Punta Cardon
84,047 bbls, Royal Petroleum Corp, Aruba
114,048 bbls, American Oil Co, Punta Cardon
76,374 bbls, Central Petroleum Corp, San Lorenz
141,803 bbls, Esso Export Corp, Las Piedras
124,925 bbls, Esso Export Corp, Caripito
279,162 bbls, Paragon Oil Co, Punta Cardon
209,729 bbls, Paragon Oil Co, Tampico
112,586 bbls, Metropolitan Oil Co, Curacao
FURFURAL—872 tons, E I Dupont DeNemours & Co, La Momana
GALLNUTS—187 bgs, Carter Moore & Co, Beirut
182 bgs, I R Boody & Co, Beirut
261 bgs, Meer Corp, Izmir
GALL, OX—11 dms, Van Gelder Fanto Corp, Montevideo
GELATIN—250 bgs, Transatlantic Animal By Products Corp, Buenos Aires
331 bgs, Manhattan Paste & Glue Co, Hamburg
500 bgs, M Corbett & Co, Marseille
GENTIAN ROOT—60 bgs, Wm E Martin & Sons, Dubrovnik
GERANIUM OIL—6 dms, Djibouti
GLUE—20 bgs, Jung Forwarding Co, London
GRAPHITE—250 bgs, Joseph Dixon Crucible Co, Colombo
600 bgs, Asbury Graphite Mills, Bremen
50 bgs, National City Bank, Genoa
GYPSUM, CRUDE—40,331 tons, U S Gypsum Co, Hantsport
16,046 tons, National Gypsum Co, Halifax
HELLEBORE ROOT—166 bls, Dubrovnik
HESPERIDIN—4 bbls, H Marmorek & Son, Haifa
HEXOGEN LEAD DRIER—2 dms, Robeco Chemicals Inc, Kobe
HYDROGEN PEROXIDE—27 dms, Terra Chemicals Inc, Hamburg
INDIGO—20 cks, Hensel Bruckmann & Lorbacher, Hamburg
IODINE, CRUDE—160 kgs, N Atlantic Fertilizer & Chemical Co, Yokohama
JUNIPER BERRIES—167 bgs, Leghorn
KAOLIN—23 dms, E Fougera & Co, London
KELPMEAL—680 bgs, Sunndal Seram
LAUREL WAX—124 cs, Guaranty Trust Co, Buenaventura
LAURIC ACID—200 bgs, I R Boody & Co, Rotterdam
LAVENDER OIL—2 dms, Dubrovnik
LEMON OIL—5 dms, National City Bank, Vera Cruz
1 dm, Vera Cruz
LEMONGRASS OIL—51 dms, Volkart Bros, Cochin
4 dms, John D Walsh Co, Cochin
LICORICE ROOT—126 bgs, Merchants Forwarding Co, Genoa
LIGNIN PITCH POWDER—3,200 bgs, Barrentan Testing & Research Corp, Oslo
LINSEED OIL—1,681 tons, Interoceanic Commodity Corp, Toronto
LIVERMEAL—530 bgs, C Hollinshed Co, Buenos Aires
1,110 bgs, Ovimpex Inc, Buenos Aires
400 bgs, Wessel Duval & Co, Montevideo
LOCUST BEAN GUM—700 bgs, Morningstar Nicol, Liverpool
100 bgs, Thurston & Braidich, Genoa
200 bgs, P A Dunkel, Genoa
200 bgs, Hathaway Allied Products, Genoa
600 bgs, Bank of N Y, Valencia
100 bgs, T M Duche & Sons, Valencia
2,853 bgs, J L Quesada, Valencia
50 bgs, Heemsoth Kerner, Rotterdam
LOCUST BEAN GUM—100 bgs, Colony Import & Export Corp, Rotterdam
120 bgs, T M Duche & Sons, Rotterdam
25 bbls, J Einstein Co, Genoa
186 bgs, Stein Hall & Co, Genoa
200 bgs, Stein Hall & Co, Rotterdam
MACE—54 cs, Karl H Landes & E Balint, Macassar
28 cs, A G Dunn, Macassar
27 cs, Shippers Produce Corp, Macassar
MAGNESITE—1,800 bgs, Bank of London & S A, Cochin
MALONIC ACID—1 dm, Interstate Chemical Corp, Bremen
1 cs, Interstate Chemical Corp, Bremen
MARJORAM LEAVES—61 bgs, Louis Furth, Marseille
MENTHOL—150 cs, Bankers Trust Co, Rijeka
MERCURY—300 flks, Hanover Bank, Leghorn
MINT OIL—13 dms, Magnus Mabee & Reynard, Casablanca
MOLASSES—550 tons, W R Grace & Co, Salaverry
BEET—2,764 tons, Chas Pfizer & Co, Rouen
MUSTARD OIL—10 cs, Magnus Mabee & Reynard, Hamburg
15 cs, Schimmel & Co, Hamburg
MYRRTH GUM—27 cs, C A Laloue, Marseille
NAPHTHOL—46 dms, Marine Midland Trust Co, Genoa
NICKEL CHLORIDE—5 cks, Oil & Chemical Products, London
NITRILE—177 tons, Hensel Bruckmann & Lorbacher, Liverpool
m-NITRO-p-TOLUIDINE—8 dms, A V Berner & Co, Liverpool
NUTMEG—219 bgs, East India Trading Co, Macassar
256 bgs, Karl H Landes & Balint, Macassar
130 bgs, Shippers Produce Corp, Macassar
68 bgs, Foreign Domestic Sales Corp, Macassar
13 bls, East India Trading Co, Rotterdam
47 bgs, Greene Trading Co, Port of Spain
248 bgs, East India Trading Co, Tandjong Priok
28 bgs, J D Smith Interocean, London
67 bgs, A G Dunn, Macassar
40 bgs, George Lueders & Co, Colombo
OIL—1 cs, Olson Importing Co, Penang
NUX VOMICA—240 bgs, S B Penick & Co, Madras
OAK TREE EXTRACT—329 bgs, Bordeaux
OJEFICIN POWDER—8 dms, Astoria Panamericana, Iquitos
OLIVE OIL—210 dms, Swiss Bank Corp, Marseille
OREGANO LEAVES—136 bgs, Louis Furth, Piraeus
220 bgs, M J Golombeck, Piraeus
OVA FORMICARUM—53 bls, Hershey Co, Rijeka
PALM OIL—216 tons, Canada Packers Ltd, Matadi
216 tons, Lever Bros, Matadi
PALMKERNEL OIL—450 tons, Matadi
PALO SANTO OIL—134 cs, C Tennant Sons & Co, Buenos Aires
PAPAIN—56 hf chts, Meer Corp, Colombo
12 cs, Meer Corp, Colombo
PAPRIKA—308 bgs, A A Sayia, Alicante
62 bgs, H Schlicting, Alicante
300 bgs, P H Petry, Alicante
200 bgs, R F Downing, Alicante
350 bgs, Gallagher & Ascher, Alicante
425 bgs, J Weinstein, Alicante
1,775 bgs, Alicante
75 bgs, Hismoco American Co, Rijeka
100 bgs, Schoenfeld & Sons, Rijeka
100 bgs, Griffith Lab, Rijeka
500 bgs, M J Golombeck, Rijeka
780 bgs, M J Golombeck, Valparaiso
150 bgs, Norwalk Mills, Valparaiso
200 bgs, Rijeka
PATCHOULI OIL—112 dms, Ungerer & Co, Singapore
PEATMOSS—500 bls, E J Lang, Bremen
1,000 bls, Marine Midland Trust Co, Bremen
120 bls, J E Bernard, Bremen
PEPPER, BLACK—70 bgs, C Czarinkow, Singapore
70 bgs, George Uhe Co, Singapore
140 bgs, Far Eastern Rubber Importers, Singapore
560 bgs, Internatio Rotterdam, Singapore
70 bgs, East India Trading Co, Singapore
120 bgs, bgs, Internatio Rotterdam, Kuching
656 bgs, Internatio Rotterdam, Tandjong Priok
180 bgs, Borneo Sumatra Trading Co, Kuching
350 bgs, A G Dunn, Singapore
140 bgs, Ludwig Mueller, Singapore
140 bgs, J F Frank, Singapore
1,420 bgs, Singapore
280 bgs, Alleppey
WHITE—346 bgs, Internatio Rotterdam, Singapore
77 bgs, Internatio Rotterdam, Tandjong Priok
280 bgs, Borneo Sumatra Trading Co, Singapore
220 bgs, Singapore
PETROLEUM, CRUDE—96,160 bbls, Metropolitan Petroleum Corp, Vera Cruz
107,480 bbls, Metropolitan Petroleum Corp, Bachaquero
170,894 bbls, Gulf Oil Corp, Las Piedras
118,161 bbls, Socony Mobil Oil Co, Puerto La Cruz
103,386 bbls, Hess Inc, Balo Grande
PINENEEDLE OIL—11 dms, Cenflor Manufacturing Co, Hamburg
PINI SILVESTRIS OIL—1 dm, Kolon Trading Co, Gdynia
PLANTAGO LEAVES—5 bls, Dubrovnik
POLLACKLIVER OIL—35 dms, Interocean Chemical & Minerals Corp, Yokohama
100 dms, National City Bank, Yokohama
POPPY SEED—166 bgs, Bankers Trust Co, Gdynia
170 bgs, Louis Furth, Gdynia
166 bgs, C M Van Sillevoldt, Gdynia
166 bgs, Joel Bieler, Gdynia
166 bgs, Hoger Corp, Gdynia
166 bgs, Levy & Levis Co, Gdynia
1,000 bgs, C Happel, Gdynia
200 bgs, M J Golombeck, Rotterdam
POTASSIUM CYANIDE—87 dms, Leviant & Co, Hamburg
HYDROXIDE—55 dms, Heemsoth Kerner, Rotterdam
METABISULFATE—25 kgs, A Gusmer, Liverpool
PYRETHRUM FLOWERS—200 bls, S B Penick & Co, Dubrovnik
40 bls, McLaughlin Gormley King Co, Dubrovnik
QUEBRACHO EXTRACT—2,030 bgs, American Tanners Ltd, Buenos Aires
4,331 bgs, River Plate Corp, Buenos Aires
RAPESEED—220 bgs, Hinton & Co, Rotterdam
RICE STARCH—230 bgs, Aurora Manufacturing Co, Trieste
ROSEMARY LEAVES—100 bls, Louis Furth, Dubrovnik
SAGE LEAVES—300 bls, Impex Overseas Corp, Dubrovnik
202 bls, Chase Manhattan Bank, Dubrovnik
800 bls, Dubrovnik
500 bls, Trieste
SAGO FLOUR—174 bgs, R Lennard & Co, Singapore
SALEP TUBERS—3 bls, Meer Corp, Dubrovnik
SANDALWOOD—735 bgs, W J Bush & Co, Madras
OIL—7 cs, Fritzsche Bros, Cochin
9 cs, Van Ameringen Haebler, Cochin
3 cs, Perry Bros, Madras
SAVORY LEAVES—40 bls, Louis Furth, Dubrovnik
33 bgs, Alicante
SEEDLAC—250 bgs, First National Boston, Bangkok
250 bgs, Parks Co, Bangkok
750 bgs, East Asiatic Co, Bangkok
250 bgs, Chase Manhattan Bank, Bangkok
550 bgs, Calcutta
SESAME SEED—94 bgs, Chase Manhattan Bank, San Juan Del Sur
HULLED—600 bgs, R J Spitz, San Juan Del Sur
350 bgs, Levy & Levis Co, San Juan Del Sur
200 bgs, Archibald & Kendall, San Juan Del Sur
100 bgs, Biddle Purchasing Co, San Juan Del Sur
SHELLAC—50 bgs, Calcutta
SODIUM ANTIMONATE—1 ck, American Porcelain Enamel Co, Hamburg
BICARBONATE—498 bgs, Chemical Manufacturing Co, Liverpool
CYANIDE—250 dms, Chemical Manufacturing Co, Glasgow
PERBORATE—111 bgs, Hamburg
PHOSPHATE—250 dms, F L Kraemer, Bremen
SILICOFLUORIDE—660 bgs, F M Sergeant Pulp & Chemical Co, Hamburg
SOYBEAN OIL—1,120 tons, Victory Soya Mills, Toronto
STRAWBERRY LEAVES—24 bls, S B Penick & Co, Dubrovnik
16 bls, Dubrovnik
STREPTOMICIN—20 dms, Chas Pfizer & Co, Vera Cruz
19 cs, Chas Pfizer & Co, Vera Cruz
SULFADIAZINE—4 cks, Southampton
SULFUR—9,957 tons, Allied Chemical & Dye Corp, Puerto Libre
TALC—750 bgs, L A Salomon & Bro, Bordeaux
18,945 bgs, Charles Mathieu, Genoa
350 bgs, Whittaker Clark & Daniels, Bordeaux
TANIGAN—1 bbl, Naftone Inc, Hamburg
TANNING EXTRACT—3 dms, Geigy Chemical Corp, Hamburg
TAPIOCA—950 bgs, Morningstar Nicol, Itajai
FLOUR—3,000 bgs, Internatio Rotterdam, Bangkok
900 bgs, Geismar & Co, Bangkok
5,000 bgs, Stein Hall & Co, Bangkok
3,000 bgs, Morningstar Nicol, Itajai
1,500 bgs, Manhattan Paste & Glue Co, Itajai
1,900 bgs, American Key Products, Bangkok
3,000 bgs, Stein Hall & Co, Santos
4,410 bgs, American Metagraph Co, Itajai
TAR ACIDS—100 dms, Glasgow
TEA OF MATTE—200 cs, W R Grace & Co, Paranagua
TEEPOL—40 dms, Shell Chemical Corp, Rotterdam
TONKA BEANS—23 cs, Machado & Co, Port of Spain
TRAGACANTH GUM—59 cs, Am-Iran Corp, Khorramshahr
41 cs, Khorramshahr
TRICHLOROETHYLENE—50 dms, Chemical Manufacturing Co, Liverpool
350 dms, Miny Corp, Venice
250 dms, Venice
TRIFOLI RUBRI FLOWERS—32 bls, S B Penick & Co, Rijeka
UREA—2,580 bgs, Nylos Trading Co, Genoa
VALONIA CUPS—2,877 bgs, Barkey Importing Co, Izmir
VANILLA BEANS—25 cs, Chase Manhattan Bank, Antalaha
29 cs, Packing Products Co, Antalaha
67 cs, J Manheimer, Antalaha
65 cs, Thurston & Braidich, Antalaha
20 cs, Thurston & Braidich, Sambava
73 cs, Djibouti
27 cs, Tamatave
VEGETABLE WAX—50 cs, Strohmeyer & Arpe, Kobe
VETIVER OIL—6 dms, Djibouti
VIOLET FLOWERS—1 cs, Herbarium Inc, Dubrovnik
WAX—315 bgs, Dura Commodities Corp, Bremen
342 bgs, Wax & Rosin Products, Bremen
WOOL GREASE—52 dms, Hummel Chemical Co, Antwerp
53 dms, Chase Manhattan Bank, Kobe
55 dms, N I Malmstrom, Genoa
3 dms, James E Fox, Genoa
40 dms, National City Bank, Kobe
XYLENOL—20 dms, Midland Tar Distillers, London
ZINC CYANIDE—220 dms, Philip Bros, Chemicals, Hamburg
PHOSPHATE—1 bbl, Chemimpex, Bremen

Philadelphia

AMMONIUM PERSULFATE—20 dms, Rohm & Haas, Rotterdam
ANTIMONY REGULUS—404 cs, Rotterdam
ASBESTOS FIBER—4,648 bgs, Chas Kurz Co, Lourenco Marques
1,000 bgs, Alltransport Inc, Lourenco Marques
600 bgs, Davies Turner & Co, Durban
400 bgs, Ruberoid Co, Lourenco Marques
BALL CLAY—343 tons, Moore & Munger, Avonmouth
526 tons, United Clay Mines, Avonmouth
236 tons, Paper Makers Inc, Avonmouth
112 tons, Avonmouth
BARIUM DESHYDRATE—300 bgs, I M Sobin, Hull
BONEMEAL—2,527 bgs, Buenos Aires
CALCIUM PHOSPHATE, DIBASIC—798 bgs, Albumina Supply Co, Antwerp
1,050 bgs, Wessel Duval & Co, Antwerp
CAMPHOR—20 cs, Vicks Chemical Co, Bremen
CASEIN—706 bgs, Melbourne
500 bgs, Rotterdam
COCONUT OIL—974 tons, Cargill Inc, Manila
484 tons, Manila
CRESYLIC ACID—150 dms, Glasgow
EUCALYPTUS OIL—5 dms, Phila National Bank, Lisbon
FLUORSPAR—3,648 tons, Tampico
GYPSUM—6,105 tons, U S Gypsum Co, Hantsport
IRON OXIDE—101 tons, American Chemical & Pigment Co, Malaga
28 tons, C K Williams Co, Malaga
LAURIC ACID—900 bgs, I R Boody & Co, Copenhagen
NAPHTHALENE — 1,981 bgs, Barrett Division, Stockholm
1,000 bgs, Gallard Schlesinger, Hamburg
910 bgs, Antwerp
2,222 bgs, Rotterdam
PEATMOSS—509 bls, Premier Peatmoss Corp, Gdynia
600 bls, Keer Maurer, Bremen
550 bls, Halfmoon Trading Co, Rotterdam
PETROLEUM, CRUDE—156,782 bbls, Atlantic Refining Co, Sidon
243,745 bbls, Atlantic Refining Co, Puerto La Cruz
230,006 bbls, Gulf Oil Corp, Puerto La Cruz
192,242 bbls, The Texas Co, Sidon
POLLACKLIVER OIL—100 dms, Albumina Supply Co, Yokohama
POPPY SEED—100 bgs, Cavanna Co, Rotterdam
POTASSIUM NITRATE—330 bgs, I M Sobin, Bremen
RUTILE SAND—3,000 bgs, Berkshire Chemicals Inc, Sydney
3,005 bgs, Sydney
SODIUM SILICOFLUORIDE—250 bgs, Kohnstamm Inc, Rotterdam

VANILLA BEANS—40 cs, Camax Co, Vera Cruz
WHITING—800 bgs, Pluess Staufer, Antwerp
4,230 tons, Southward Co, London
1,600 bgs, Antwerp

San Francisco

ALUMINUM SULFATE—200 bgs, Millmaster Chemical Corp, Antwerp
AMMONIUM CHLORIDE—298 bgs, C M C Chemicals Inc, Manchester
BONEMEAL—1,000 bgs, W Harris & Co, Manchester
CALCIUM CHLORIDE—1,000 bgs, Antwerp
NITRATE—10,000 bgs, Wilson & Geo Meyer & Co, Heroya
1,000 bgs, Atkins Kroll & Co, Amsterdam
CARAWAY SEED—250 bgs, Lagendorf Bakeries, Rotterdam
50 bgs, W R Grace & Co, Rotterdam
COPRA—750 tons, Cargill Inc, Cebu
621 tons, Procter & Gamble Co, Cebu
280 tons, Pacific Vegetable Oil Corp, Cebu
DEXTRIN—92 bls, Adhesive Products Inc, Amsterdam
GLUE—20 bgs, W Harris & Co, Manchester
KELPMEAL—1,000 bgs, Simone & Co, Stavanger
MOLASSES—1,189 tons, Southwestern Sugar & Molasses Co, Iloilo
NUTMEGS—106 bgs, H M Newhall & Co, Rotterdam
PETROLEUM, CRUDE—20,469 tons, Standard Oil Co, Sungai Pakning
15,862 tons, Standard Oil Co, Vancouver
15,855 tons, Security National Bank, Sungai Pakning
15,436 tons, Tidewater Oil Co, Vancouver
27,112 tons, Tidewater Oil Co, Mina Saud
POPPY SEED—50 bgs, Ziel & Co, Rotterdam
POTASH, CAUSTIC—20 dms, D M Hicks Inc, Rotterdam
SODIUM BICARBONATE—600 bgs, C M C Chemicals Inc, Manchester
CYANIDE—100 dms, C M C Chemicals Inc, Glasgow
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DDT, 2,200 lbs., grade B, 2,500 2-oz. sifter top cans DDT, powd. dusting, inv. DA-2539, Dec. 18, Gen. Services Adm., Region 7, Business Service Center, 1114 Commerce Street, Dallas, Tex.

Diatomaceous earth, 30,000 lbs., inv. 128, Dec. 20, Purchasing & Contracting Office, Elmendorf AFB, Anchorage, Alaska.

Diethylbenzene 2,400 lbs., inv. 23249, Dec. 26, Govern. Printing Office, Purchasing Agent, Washington 25, D.C.

Gum arabic, 2,000 lbs., inv. 23305, Dec. 20, Govern. Printing Office, Purchasing Agent, Washington 25, D.C.

Nitrocellulose, 2,000 gals., inv. 80, Dec. 21, Armed Services Petroleum Purchasing Agency, Washington 25, D.C.; 33,600 lbs. nitrocellulose, fiberous, with complete absence of pills, pellets, or small compact lumps, and the fibers must be very short and curly, inv. 59, Dec. 26, Naval Powder Factory, Navy Dept., Purchasing Office, India Head, Md.

Paint, estimated quantities traffic paint, inv. SF-5043, Dec. 20, Gen. Services Adm., Business Service Center, Region 9, 49 Fourth St., San Francisco 3, Calif.: 2,250 gals. ship interior enamel, beach sand, inv. (4)-850, Dec. 19, 20,000 qts. cellulose nitrate, instrument lacquer, inv. (4)-852, Dec. 19, 9,804 qts. stencil paint, type II, semi paste, inv. (4)-825, Dec. 18, 2,000 gals. bare metal, lacquer resisting primer coating, inv. (4)-847, Dec. 18, 4,925 gals. interior primer coating, inv. (4)-835, Dec. 19, 2,600 gals. syn. primer surfaces, inv. (4)-844, Dec. 19, 376 gals. lusterless lacquer paint, 2,954 gals. alkyd type zinc chromate paint, 2,072 gals. dust zinc oxide, type II, zinc primer paint, inv. (4)-838, Dec. 28, 412 gals. syn. gloss enamel, class A, inv. (4)-853, Dec. 26, 2,884 gals. quick drying, lusterless enamel, 11,220 gals. turpentine, type I or II, inv. 824, Dec. 26, 3,196 gals. wood interior, oil type stain, inv. (4)-854, Dec. 26, 1,844 gals. interior, oil type wood stain, 712 gals. water repellent wood preservative, inv. (4)-855, Dec. 28, 7,692 gals. kettle boiled linseed oil, 20,625 gals. syn. primer, lacquer resisting, type I, for general purposes, 78,235 gals. syn. gloss enamel, class A, inv. (4)-846, Dec. 26, 3,824 qts. quick drying, interior, gloss enamel, inv. (4)-849, Dec. 20, 37,532 gals. syn. gloss enamel, inv. 839, Dec. 19, small business only, 11,000 gals. camouflage lacquer, inv. 845, Dec. 20, 685 gals. lusterless paint enamel, 2,040 qts. sign paint, 2,504 qts. shellac varnish, inv. 837, Dec. 18, 31,400 lbs. various commercial specification vinyl resin, inv. 848, Dec. 18, Gen. Stores, Supply Office, Navy Dept., 700 Robbins Ave., Phila. 11, Pa.

Pesticides, 200 lbs. dieldrin, 200 lbs. basudin, 300 lbs. dithane or parzate, 200 lbs. caresan, 100 lbs. thyson, inv. FNW-4F-7054-N, Dec. 27, Gen. Services Adm., Fed. Supply Service, National Buying Div., 7th & D Sts., S.W., Washington 25, D.C.

Sodium phosphate, 1,091,400 lbs., tribasic, tech., type 1, anhyd., powd. or gran., inv. 36, Dec. 26, N. Y. Chem. Procurement Dist., 180 Varick St., N. Y., N.Y.

Titanium dioxide, 500 lbs., white, inv. 23250, Dec. 26, Govern. Printing Office, Purchasing Agent, Washington 25, D.C.

Agricultural Council to Meet

The Council for Agricultural and Chemurgic Research will hold its twenty-second annual chemurgic conference March 26 through 28, 1957, at the Congress hotel, Chicago. A public meeting will take place the evening of March 25.

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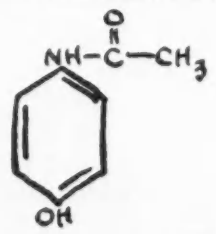

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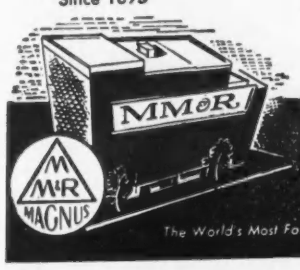

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Essential Oils, Aromatics

The market showed some movement last week despite the end-of-the-year-lull. Movement was primarily in the essential oils, though seeds and spices also showed some movement. Price shifts in the oils eld were reported in bois de rose, celeryseed, citronella, clove buds, geranium, ginger and lavender. Bois de rose was the only material of the lot to decline, falling 20c. per pound to a $3.50 inside spot quote. Dealers blamed the movement on the end-of-the-year-lull, but it was noted that interest had been lacking in this material for a number of weeks. Celeryseed, which had been moving upward for some time, climbed 50c. higher to a $14 per pound spot quote. Ceylon quality citronella oil advanced 4c. per pound to a 90c. spot quote. Though the entire citronella market had previously been showing some softness, the situation since the eruption of the Suez crisis has been one of progressive firmness. Time will show just how dependent the present citronella market is upon the Middle Eastern situation.

Clove bud oil advance in price last week in a clove market which has been showing good strength on both the local and foreign scene. The new listing, $2.85 per pound, is 20c. higher than the previous listing. Clove leaf oil is also said to be showing strength on spot. The rise in buds is reportedly resultant of the rise in the cost of source material. The leaf oil market has noted heavy receipts of material on spot, with healthy demand in response to the relatively low quotes.

Bourbon quality geranium oil advanced 25c. per pound last week, as the result of the continued shipping tie-up in the Suez area. The material was somewhat easier prior to the beginning of the Middle Eastern situation. Supplies, it has beeen noted, have been in heavy enough quantities to meet demand. Alegrian material continued at its previous listing but reflected the present good demand.

Ginger oil advanced to $20 per pound on the inside, a 50c. advance over the previous listing. This is the second advance for ginger oil in the last two weeks. Dealers attributed the current situation to the quantities of poor quality raw material that have been entering the country.

The seeds and spices market saw a lethargic turn of events take place in the pepper market, though dealers claimed that trading in other materials diverted attention from the pepper situation. Nutmegs, which had been wildly climbing, continued steady without much activity. Chillies advanced on steadily rising cables from Japan. Jamaica ginger turned firmer and attracted attention to newcrop Cochin at one-fourth the price, resulting in active trading. Cloves staged their expected rally, advancing in price, while Alleppey turmeric likewise revived, gaining in price also. Paprika entered what appeared to be a seller's market and, toward the end of the week previous, cassia also realized some stepped-up demand. Celeryseed rose further, with newcrop June/July already in demand, without finding eager sellers. Cardamons, cinnamon, cuminseed and thyme also looked good on spot.

Price Trends

Advanced

Oil, celeryseed, 50c. per lb.
Bergamot, 25c. per lb.
Citronella, Ceylon, 4c. per lb.
Clove, bud, 20c. per lb.
Geranium, Bourbon, 25c. per lb.
Ginger, 50c. per lb.
Lavender, spike, 55c. per lb.

Reduced

Oil, bois de rose, 20c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Dec. 16, 1955
138.81	138.67	137.85	134.84

For Current Prices see Page 9

Essential Oils

Bergamot—The advance in spot prices for bergamot oil reflects a late rise of approximately 25c. per pound in the Consortium's price in Italy. New spot prices range from $10 to $11 per pound. There is a strong possibility, it was noted, that prices for this material will show a further rise because of mounting transportation costs.

Bois de Rose—This material, as the result of the end of the year slump, has begun to sink in listing again, it was reported last week. The current quote on spot of $3.50 per pound, is 20c. less than the previous listing. One source noted that some material has been reaching spot from Peruvian ports. The trend toward moving Brazilian material out of Peruvian ports marked the final days of the downward movement of the bois de rose market earlier in the year. New influences in the market, attempting to reverse the trend of the market, put a temporary end to this dumping movement. However, it appears that the activity during this lull in the market has been started once again.

Celery Seed—This material again showed the steady development of its strength on spot through another advance in listing. The new inside listing, $14 per pound, is 50c. higher than the previous quote. No reversal in the position of celery oil is anticipated.

Citronella—Ceylon quality citronella oil moved up in price again last week, dealers here reported. The firming movement, an advance of 4c. to a 90c. per pound spot listing, is merely one facet of the over-all strengthened citronella oil picture. Originally, on the heels of heavy shipping price deceases for Formosan material, this oil started to slide downward. Dealers noted that the picture might still be one of softness but for the shipping situation developed out of the MiddleEast crisis. As a result of that, and the continued limitations on shipping, the citronella market has reached a level of relative strength.

Clove—This oil, according to dealers and information from source, remains relatively strong on both spot and abroad. The spot listing last week bore this out with a shift of the clove bud oil price of 20c. per pound to a $2.85 quote. The new price, dealers here said, is resultant of the rising costs of buds. Leaf oil also is reportedly commanding a fairly brisk demand. This is owing to a great degree to its eugenol content. Industrial demand is keeping this demand at a high level. Fairly heavy receipts of leaf oil have been arriving from Madagascar as the result of recent heavy purchases made in the primary center when prices dropped rather sharply. Buyers were particularly anxious to take advantage of the low prices. Receipts on a single steamer arriving here two weeks ago exceeded 700 casks, each cask weighing approximately 400 pounds.

Geranium—Bourbon quality material advanced 25c. per pound last week, dealers here reported. The new listing is resultant of the prolonged shipping situation due to the Suez crisis. Prior to the developments in the Mid-East, the situation of this material had been relatively easy in tone with enough material about to supply demand. Algerian material continued at its previous level, though it also was reflecting present conditions and some quantities that had been offered at the present rate of $12.50 per pound was upped to $13.

Ginger—This material moved upward once again last week, dealers here reported. The movement is the second rise in two weeks. The current inside listing, $20 per pound, is 50c. per pound higher than that of the week previous. The earlier quote was an advance of about $1 per pound. Dealers attribute the current condition and position of ginger oil to the fact that quantities of poor quality raw material were brought into the country and yielded a poor return of oil, thus making the material tight on spot.

Lavender—This material on all fronts was reported as exceedingly strong, dealers here noted last week. The price of spike lavender, reflecting this strength through a 55c. per pound price advance to a $2.60 listing. The firmness of the lavender market is resultant of the crop damage done prior to harvest time. The extent has been computed at about forty percent of the normal crop. The feeling is, however, according to one dealer, that due to heavy planting this year, the pres-

Essential Oils

ent market condition will not prevail next year or in the years to come.

Lime—This oil, which has stood in a strong position on the spot market for some time now, advanced last week in express material. The new listing, $7 per pound, is 75c. higher than the previous quote. Lime oil has been high in the citrus group in strength since early in the seasonal period. Through the hot weather sales period, it showed a steady firmness and relatively steady advancement. Then, unlike most of the other seasonal demand materials, it continued to show strength and advancement in the months that followed. During the holiday seasonal demand days, it advanced once again, slightly and then continued to hold to its firm position. The advance in the expressed material, it is reported, is due to the steady advances that had taken place already in the distilled material market.

Peppermint—This material displayed an improved tone following a recent reversal in the downward trend and the long term outlook, according to dealers on spot, is regarded as good now that the distillation of this year's crop has been completed. Trade observers noted that the expectation for the first quarter of next year is one of strength. Sellers of some of the cheaper brands of peppermint are, at present, holding for higher prices and the passing of the yearend holiday season should bring about renewed buying interest in the market. While the listing for the material on spot remains unchanged, some sellers have moved their selling schedules upward in line with a number of listings quoted on spot.

Rose—Dealers here reported that the political situation in Eastern Europe has driven the price of this material upward. Listings of rose oil, according to one source, run as high as $67 per pound. Even this figure, it is said, is only being quoted for limited lots.

Aromatic Chemicals

Little variation was reported in this market last week, dealers here noted. This is partially due to the end-of-the-year hiatus that has set in. Another factor is the easing of the over-all essential oil picture. Dealers and producers noted that the feeling is that the market for the most part, through the first quarter of the next year, will hold to a relatively even and firm course due to the continued Middle-East crisis influence.

Hydroxycitronellal—Production of this material during 1955, according to a report by the United States Tariff Commission, amounted to 116,000 pounds. Sales of hydroxycitronellal during 1955 amounted to 123,000 pounds at a value of $702,000. The unit value of the material during this time was $5.71 per pound.

Geranyl Formate—The United States Tariff Commission report on production of this material computed the total 1955 figure at 5,000 pounds with the entire amount sold in 1955 for a total of $26,000 at a unit value of $4.68 per pound.

Seeds and Spices

Reports from one dealer on conditions at the beginning of the week noted that the market here in New York receded fractionally during the week (previous) in moderate trading, unconcerned with the fact that both Lampong and Sarawak shipment prices now stand above spot New York. A slight softening of Malabar quotations may have contributed to the decline but even at their lowest, India offers failed to represent a reasonable replacement against spot pepper at 27c. per pound. Although the feeling is pretty general that no sharp decline is to be expected, visible supplies on spot and afloat continue to dissuade the trade from adopting a more positive attitude at this time. The best that may be said is that the 27c. level seems difficult to break on the downside and salt at or slightly above that level appear to be motivated by a desire to create buying power, to be utilized as and when the market develops a tendency of its own.

Cloves — Madagascars moved ahead smartly, according to one dealer, as prices at source hardened. With the peak of the crop period, October/November, already gone, the pressure to sell at source abated. Holdings here are reportedly conservative and the appearance of demand was reflected in an advance.

Ginger—Opening prices on newcrop Jamaica material came at high levels, it was noted here last week. They served to focus attention on the tight supply position of this type of ginger. Other grades shared in the interest, with particular attention paid to spot and shipment Cochin ginger as it is said to be available well below comparable quality material quotes. The fact that India has been a consistent seller of Cochin for newcrop shipment has depressed prices to a very cheap level. In view of the prospect of better availability as well as the reasonable price level some dealers suggest that this material is the best buy on the market at present. Newcrop Nigerian is at least five cents higher than Cochin; newcrop African is about eight cents higher, and Jamaica is very high.

Nutmeg—Both this material and mace, showed little movement here last week, dealers here reported. The feeling is that the material has momentarily settled into a lull following the swift movement upward of the past weeks. The strength continues as the result of light supply and good demand. There is no variation expected in the direction of the market for some time.

Paprika—Spanish prices continued to work their way upward, dealers here reported last week. Yugoslavian crop prices were likewise higher. Odd lots of Chilean material were reported as available on the spot but shipments have dried up.

Pepper—The market drifted indifferently most of the week, one dealer here noted. Steady to firm cables from Singapore had little or no effect on prices here. Arrivals continued to be pressed for sale while on the dock, and the limited offtake did not absorb them fast enough to prevent fractional declines. India slipped off slightly and appeared as the only competitive seller of futures. Very obviously the market is going through a period of transience and has not reached a level at which the new Malabar crop can be easily assimilated. From all reports, the crop is not large and consumption in India as well as the rest of the world has increased due to the lower levels. Therefore, the problem of balancing the new supply and demand equeasion should not be too difficult.

Tumeric—Dealers here reported that this commodity bore close watching. Reports from India, they noted, offered information of a sharply reduced crop and short covering is expected to raise prices considerably above present levels by next Spring.

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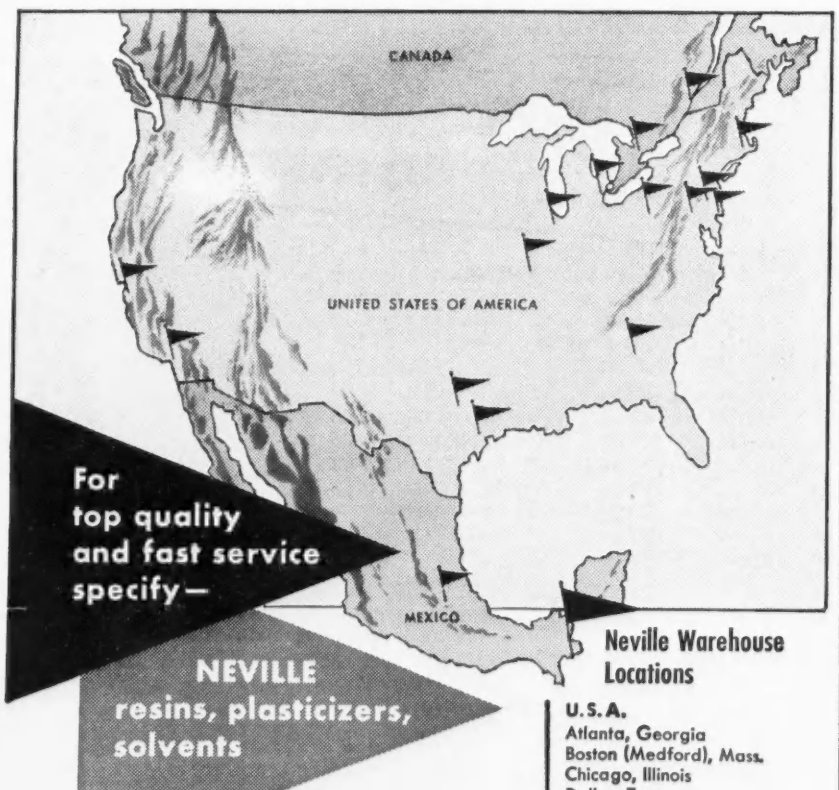

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Philadelphia, Pennsylvania
Pittsburgh, Pennsylvania
St. Louis, Missouri
San Francisco, California
South Kearny, New Jersey
Trenton, New Jersey

CANADA
Montreal, Quebec
Toronto, Ontario

MEXICO
Mexico, D.F.

Coatings Materials

Buying interest in the coatings field was generally lower last week, although some of the plasticizers and synthetic resins were still moving in heavy volume, particularly to the automotive and rubber industries. Pigments derived from lead and zinc encountered reduced buying interest, as production in consuming industries began to taper off. Business volume in natural resins was also lower, being limited strictly to prompt requirements. Many consumers were dipping into inventories in order to avoid holding excess supplies at the end of the year.

The only price change recorded last week was in Argentine casein, a material which declined ½c. per pound in response to spotty buying interest and a heavy supply level in the Argentine. While stocks in the major consuming mills here are known to be light, consumers have been buying only sparsely. According to one dealer, uncertainty about the world situation has induced many to buy only for immediate needs.

Another major producer has joined the list of dry colors manufacturers announcing extensive price advances for the first of the year. The changes involve iron blues, chrome colors and many lakes, toners and other organic pigments. A 17 percent jump in the price of dyestuffs is believed to be a primary factor behind these advances. However, other cost increases in labor, material and transportation have been absorbed throughout the year.

Also to be advanced at the first of the year are alkyd resins, which will be moved up on contract ½c. per pound. The producer reporting this change said that vinyls, ester gum solutions, maleics and phenolics would be held steady at current listings.

According to the 1954 Census of Manufacturers, six states accounted for 63.7 percent of the total industry shipments. These states—New York, New Jersey, Pennsylvania, Illinois, Michigan and California—shipped material valued at $952,329,000. These figures adhere fairly well with the pattern revealed in 1947, when shipments from those states accounted for 64.4 percent of the industry total.

The 1954 Census also revealed that in that year, expenditures for new capital amounted to only 1.4 percent of total shipments, as compared with 2.7 percent in 1947. Any significance attached to these figures however, must be qualified by the fact that 1954 was a comparatively slow year, in all fields for capital expansion.

Price Trends

Advanced
None.

Reduced
Casein, imp., Arg., ½c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 16 1955
100.29	100.29	100.30	98.26

For Current Prices see Page 9

January 1 Price Advances

Blue, iron, 2c. per lb.
Peacock, fugitive, 100 percent color strength, 5c. per lb.
Victoria toner, PMA, 20c. per lb.
PTMA, 20c. per lb.
Chrome colors:
Yellow and orange, zinc yellow and molybdate chrome orange, 1½c. per lb.
Green, 2c. to 4c. per lb.
Green, brilliant, PMA, 20c. per lb.
Malachite, PTMA, 20c. per lb.
Pigment B, 5c. per lb.
Maroon, BON acid, 10c. per lb.
Toluidine toner, 20c. per lb.
Orange, dinitroaniline toner, orthonitroaniline toner, 5c. per lb.
Red, chlorinated para toner, 5c. per lb.
Eosin toner, 10c. per lb.
Lake C toner, 7c. per lb.
Lithol rubine toner, 5c. per lb.
Para toner, CP, 5c. per lb.
Rhodamine, PMA, 10c. per lb.
PTMA, 20c. per lb.
Rubine toner, resinated, 5c. per lb.
Toluidine toners, all shades, 5c. per lb.
Violet, methyl toner, PMA, 20c. per lb.
PTMA, 20c. per lb.
Yellow, benzidine, 10c. per lb.
Hansa, 10c. per lb.

Prime Pigments

Aluminum Paste, Powder—A seasonal decline in activity of the roofing industry has been in effect since the onset of cold weather. As a result, quieter trading in aluminum pigments has been noted. Quotations, unchanged since the third quarter, are steady at the following listings:—Paste, lining, extra-fine, drums, 68c. per pound; standard grade, 48c. per pound; powder, lining, extra fine, drums, $1.09 per pound, and standard grade, 78½c. per pound.

Blue, Iron—Another maker announced last week a 2c. advance in iron blue, bringing to three the number of producers who have scheduled this change for the first of the year. The new prices are already in effect in the listings of two producers. The increase brings quotations to 52c. per pound for minimum deliveries of 23,000 pounds, 53c. per pound for minimums of 2,000 pounds, and 54c. per pound for minimums of 250 ponds.

Chrome Colors—To date, three major manufacturers have scheduled first quarter price advances in these colors. To be increased 1½c. per pound are chrome yellow and orange, zinc yellow, and molybdate chrome orange. Chrome green will be increased 2c. per pound. Like iron blues, these colors have already been increased by two producers in the field. Chromium oxide is to be left unchanged at the advanced level established early this month.

Lead Pigments—Production and shipments of lead pigments showed a decline in September, according to a report of the Lead Industries Association. Output of red lead and orange mineral dropped to 2,107 short tons in September from 2,733 short tons in August. In September 1955 output amounted to 2,778 short tons. September shipments were 2,107 short tons, as compared with 2,430 short tons in August and 2,832 in September 1955. Stocks on October 1 totaled 3,376 short tons, compared with 3,469 short tons on September 1, and 3,139 short tons on October 1, 1955. Litharge and lead oxides in process on October 1 were 4,211 short tons, as against 4,684 short tons on September 1 and 5,096 short tons on October 1, 1955.

This class of paints (including zinc pigments) was moving to reduced buying interest last week, marking the end of the high production season in the major consuming industries. Quotations, which usually move in close conformity with the basic metals, were uniformly steady, reflecting the stability of the metals market.

Synthetic Resins

Alkyds—With the first of the year, contract prices are being advanced ½c. per pound by a major producer here. This is the first price change posted in alkyds by the producer since April 1. The move was said to reflect increased costs of raw materials and containers, and an advance in freight rates. Varying reports were heard last week on the current sales situation. In some quarters, sales were still at or near levels reached in November. Other producers, however, found buying

Coatings Shipments, Output: October

	Factory shipments Dollars		Reported production Gallons	
	October	September	October	September
Trade sales	$81,935,000	$79,481,000	22,881,000	21,217,000
Industrial sales, total	58,374,000	49,930,000	21,742,000	18,253,000
Paint and varnish	43,678,000	36,820,000	16,027,000	13,395,000
Lacquer	14,696,000	12,110,000	5,715,000	4,858,000
Overall totals	$140,309,000	$128,411,000	45,301,000	40,064,000

Total sales January through October: $1,352,664,000.

Coatings Materials

interest moving lower to a pre-holiday level.

Ester Gum Solutions—Prices continued unchanged at 11½c. and 14½c. per pound for tankcars. The spread between prices represents varying grades of material. At least one major producer has decided to hold these resins steady for the next contract quarter. The last reported change was an advance of ¼c. per pound announced November 7.

Maleics—Advances of ¼c. to ½c. per pound posted in November have been firmly maintained. Business volume is reported to be moderate to good in most outlets. Supplies are plentiful.

Pentaerythritol — Production of pentaerythritol in September dropped to 5,048,629 pounds from 5,517,408 pounds in August, according to a report by the Tariff Commission. The production figure for September 1955 was 5,930,475 pounds.

Lacquer Materials

Adipates—Sales are reported to be moving along well for this time of the year. Among the most active buying outlets are the automobile and rubber industries. These materials are steady in price at long-prevailing levels, and so far have not been mentioned as likely candidates for January 1 advances. Producers have stocks at ample levels to take care of the current market.

Diethyl Phthalate—This plasticizer is in a generally strong position. It should be noted that the ½c. per pound price advance of October 1 has been firmly maintained by all producers. The amount of material available in the market appears to be good ratio to the demand level. The latter is still fairly active, although some important consuming industries have reached the last stage of the high production season. The gradual but persistent increase in automobile production continues as a mainstay of the market.

Dimethyl Phthalate—Buying interest remains good, although it has moved to a somewhat lower level since the middle of November. The rubber and automobile industries are providing the strongest demand for the material. Quotations have been steady and unchanged since October 1, with no changes announced for the first quarter.

Dioctyl Phthalate—Production of this plasticizer in September declined to 7,426,579 pounds from the 9,048,036 pounds produced the previous month. In September, 1955, output was 7,578,589 pounds.

Good buying interest is being encountered, but pricewise the market could be described as soft. All of the large volume producers have held quotations steady at the reduced levels posted at the start of the quarter. However, downward pressure is always felt whenever marginal firms, selling the material at ½c. to 2c. below the established price, are able to offer adequate quantities of material in the market. This situation is believed to have occasioned the last price reduction of 2c. per pound, across the board. While no word has been heard yet of a January 1 reduction, sources in the market are not discounting such a possibility.

Output of phthalic anhydride in September dropped to 22,690,005 pounds from 24,142,752 pounds the previous month, according to a report of the Tariff Commission. Production in September, 1955, amounted to 30,414,495 pounds. These declines represent the considerably expanded stocks accumulated in the industry with the end of the anhydride shortage early in the year.

Sebacates—A major producer reported last week that a January 1 price advance would soon be announced. Current quotations on dibutyl sebacate are 66c. per pound for drums in carlots, 66½c.-67c. per pound for less than carlots, and 64-64½c. per pound for tankcars.

Natural Resins

Copal Gum—Seasonably quiet buying interest was reported last week. Sales were moving almost exclusively for immediate requirements. A not inconsiderable group of consumers preferred to work off inventories in order to avoid holding excess supplies at the end of the year. Usually this seasonal decline is followed in January by a substantial jump in sales.

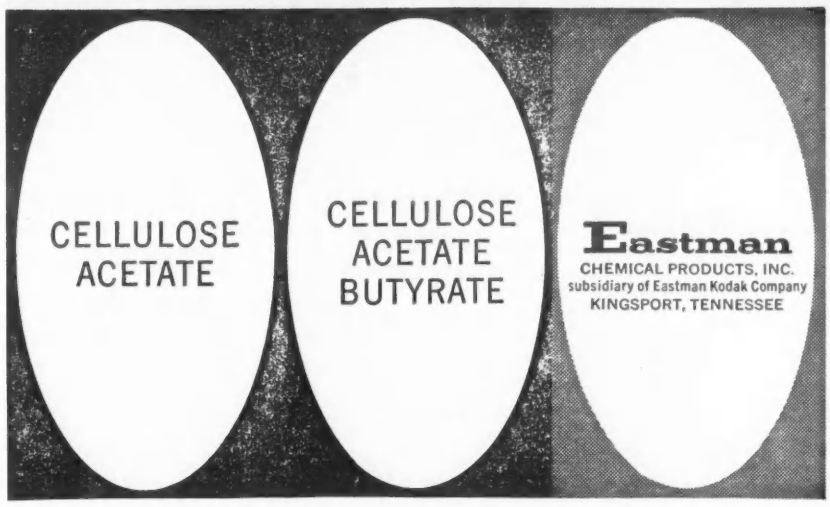
The entire list of prices held steady. Unchanged quotations of Philippine materials are 21½-24c. per pound for pale chips, 31½-34c. per pound for nubs, 20-22c. per pound for seeds, and 19¾-22c. per pound for sorts.

Dammar Gum—Quotations held steady against a slow rate of demand. The primary factor governing the present market is the consumer's policy to let stocks fall to a minimum at the end of the year. In keeping with this policy, buying is sparse and limited to prompt needs. Quotations on the most active dammars are 36½-39c. per pound for Siam, 44½-46c. per pound for Singapore No. 1, 31¾-33c. per pound for No. 2, and 16¾-18c. per pound for No. 3 dust.

Shellac—While the level of buying interest has moved lower in recent weeks, quotations on shellac have remained steady and unchanged. The current drop in interest is strictly a seasonal matter, and should show a sharp reversal in January. The outlook for bleached shellac in the immediate future is said to be favorable. Orange grade quotations are 46c. per pound for lemon No. 1, 45c. per pound for No. 2, and 44c. per pound for superfine. Supplies are adequately available.

Miscellaneous

Casein—While stocks in the major consuming mills are only light to moderate, buying has been sparse and irregular. Apparently, with the world situation as



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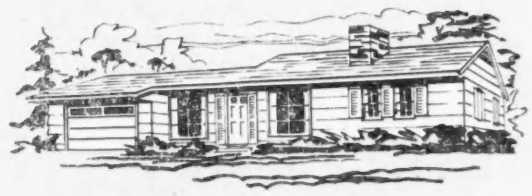
for Outside House Paint



LEAD-FREE

GRADES	PARTICLE SHAPES	PARTICLE SIZES	OIL DEMANDS
XX-2	SPICULES MULTI-FACETS JACKS	MEDIUM	16
XX-50	SPICULES MULTI-FACETS JACKS	MEDIUM LARGE	15
XX-55	SPICULES MULTI-FACETS JACKS	MEDIUM	17
XX-503	ROUNDS	LARGE	11
XX-505	SPICULES MULTI-FACETS	MEDIUM LARGE	18
XX-601	ACICULARS	MEDIUM LARGE	14

LEADED

GRADES	WHITE LEAD CONTENT %	PARTICLES	OIL DEMANDS
Lehigh-6	35	CO-FUMED	12
Lehigh-61	35	BLENDED	14
Lehigh-635	35	ACICULAR	13
Lehigh-250	50	BLENDED	12

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Nitrogen, by weight	46% Minimum
Water, by weight	0.5% Maximum
Ash	35 ppm Maximum
Iron, as Fe	2 ppm Maximum
Free Ammonia, as NH	40 ppm Maximum
Color, APHA (10 gm. in 100 ml. methanol)	10 Maximum
Turbidity, ppm SiO.—APHA standard (50 gm. in 100 ml. water)	30 Maximum
ph (10% aqueous solution at 20° C.)	7.0 to 9.8

Grace

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Coatings Materials

clouded as it is, these customers prefer to buy for prompt requirements only, holding inventories to the workable minimum. Another weakening factor in the current market is the rather substantial extent to which Argentine supplies have grown in recent weeks. This is mainly the result of a season of unusually good weather which has made for a high yield and has facilitated transportation. In response to these factors, casein prices declined last week 1½c. per pound, to 22¾ to 23c. per pound, for shipment in late December and early January, delivered New York, duty paid.

In contrast to Argentine material, New Zealand and Australian casein are in a generally firm position. Having sold in advance much of their production to Europe, these countries are not able to offer shipments any earlier than for April or May deliveries in this country. In view of the instability of the price of casein, these delivery dates have not found much response among consumers.

Naval Stores

Rosin Gum

(USDA, per 100 lbs.)

	Fri. Dec. 7	Mon. Dec. 10	Tues. Dec. 11	Wed. Dec. 12	Thur. Dec. 13
Drums—					
M	...	...	...	$8.28‡	...
N	...	...	...	8.34‡	...
WG	$8.50	...	...	8.50	$8.63
WW	...	$8.90	...	8.98	8.95
Bags—					
K	...	...	...	8.25	...
M	...	...	$8.15	8.25	...
N	8.25	...	8.45	8.25	...
WG	...	...	...	8.40	...
WW	...	...	...	8.80	...

Tankcars (for week ended December 7)—M or better, $7.77‡

Sales, USDA

573*	268*	160*	1,068*	320*

New York

(per 100 lbs., c.l., Friday)

B through M, $9.30; N, $9.40; WG, $9.60; WW, $9.90

Turpeline Gum

(USDA, per gal, 7.2 lbs.)

Price	.58	.5825	...	...	...
Sales	8,000¶	8,000¶	...	...	...

New York, Friday, per gal. 7 lbs., tankcars, 67½c., l.c.l., 78c.

* Drums equivalent. ¶ Gallons. ‡ Average price.

Defense Manpower Plan Is Suspended by ODM

Office of Defense Mobilization has announced suspension of Defense Manpower Policy No. 1, pending its review in the light of current economic conditions and labor supply.

The policy which had been in effect since August, 1951, directed government agencies to give adequate consideration to the manpower factor in the location of new defense plants, the placement of defense contracts and the allocation of materials.

The action was taken upon the recommendation of the Interagency Manpower Policy Committee in order that the policy may be reviewed in the light of present high level economic activity and the current defense production program.

Atomic Energy Information Is Freed for Civilian Use

A revised policy covering the declassification of atomic energy information in the United States, Great Britain and Canada, last week opened up for publication a large additional volume of technical information essential to the development of a civilian nuclear industry here and abroad.

The declassified information relates to all phases of nuclear power, from ore recovery and fabrication of fuel elements to the design and operation of plants for the chemical recycling of spent fuel elements from civilian reactors.

Of prime interest to American industry, it was stated, is the declassification of civilian power reactor information.

New York Trade Board Elects Two Vice-Presidents

Lloyd I. Volckening, president and board chairman of Ivers Lee Company, Newark, N. J., has been elected vice-president of the New York Board of Trade. Robert B. Magnus, vice-president of Magnus, Mabee & Reynard, Inc., New York, was reelected as vice-president for another one year term.

Mr. Volckening was formerly chairman of the Drug, Chemical and Allied Trades Section of the Board of Trade and has served as a director of the board for several years.

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It is water white in color and passes all pertinent stability and copper corrosion tests. It is practically odorless, is doctor sweet and is relatively color stable.

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Obituaries

Adolph Barta

Adolph Barta, secretary-treasurer of the Proprietary Association of America, died Dec. 6 in Leesburg, Va. He was fifty-seven years old.

Mr. Barta became affiliated with the Proprietary Association in 1942, becoming its secretary-treasurer in 1945. He served as a fiscal consultant to the house appropriations committee for ten years.

Robert E. Hair, retired general manager of Gypsum, Lime, & Alabastine Company of Canada, died December 12 in Paris, Ontario, Canada. He was ninety-two years old.

Michael J. Roche, general manager of the corporate advertising services division of Lever Brothers Company, New York, died December 13 in New Rochelle, N. Y. He was fifty-six years old.

John R. Simon, former vice-president of Sinclair Consolidated Oil Corporation and director of Electric Bond & Share Corporation, died December 5 at Sea Island, Ga. He was eighty years old.

Jeffrey R. Stewart, head of Stewart's Research Laboratory, Franconia, Va., died December 9 in Ft. Lauderdale, Fla. He was fifty-one years old.

Phillips Petroleum Men Perish in Airplane Crash

Eight employees of Phillips Petroleum Company, Bartlesville, Okla., were killed last week when a company airplane spun into a ranch pasture near that city.

The dead included all the plane's occupants—six company officials and two pilots. Among the victims was A. M. Rippel, manager of Phillips' natural gas division. He was sixty-one years old.

Also included were W. C. Reed, thirty-seven, a company attorney, and C. W. Binckley, forty-five, George L. Sneed, forty-nine, D. F. Mayfield, forty-nine, and T. D. Young, thirty-one, members of the natural gas division.

Also killed were pilots Joe Bower, thirty-eight, and R. E. Ullrich, thirty-six. Mr. Rippel, widely known in the natural gas industry, joined Phillips in 1925.

Union Carbide Buys Farm For Agricultural Research

Union Carbide and Carbon Corporation, New York, has exercised an option to purchase a 142-acre farm near Raleigh, N. C., which will be used for experimental work on agricultural chemicals.

According to Dr. G. H. Law, vice-president of research of Carbide and Carbon Chemicals Company, a division of the corporation, the farm will be used immediately to test Carbide's newest "Crag" brand synthetic weed killers, fungicides and insecticides.

The tract purchased lies seventeen miles southeast of Raleigh. Proximity to the three institutions comprising the North Carolina research triangle: Duke University in Durham, the University of North Carolina in Chapel Hill, and North Carolina State College in Raleigh, will enable Carbide's farm scientists to work with researchers with whom they have had association for several years.

Union Oil Co. Realigns Its Marketing Dept. Setup

In a major reorganization of Union Oil Company's marketing department, dividing wholesale and retail responsibilities, Roy Linden, vice-president and sales manager, has been named vice-president in charge of marketing. R. H. Rath, formerly central territory manager, has been named sales manager for dealer sales and W. L. Spencer, formerly manager of national and refinery sales, has been named sales manager for direct sales of the Los Angeles company.

In the company's three primary west coast marketing territories, responsibilities will now be divided between dealer sales and direct sales. Prior to this move a single manager had been in charge of each territory.

Kerr-McGee to Build Unit

Construction is scheduled to start this month on a $1.9 million office building expansion for Kerr-McGee Oil Industries, Inc., Oklahoma City, Okla. The company's headquarters building will be enlarged from approximately 56,000 square feet of floor space to 173,000 square feet, in a project that calls for remodeling of two buildings and construction of an 11-story tower connecting them.

Nylon Extrusion Compound Is Developed by Barrett

The development of a new polycaprolactam-type nylon compound, "Plaskon Nylon 8201," specially formulated for extrusion and blowmolding, has been announced by Barrett Division of Allied Chemical & Dye Corporation, New York.

The nylon compound represents a number of improvements over previous nylon compounds, Barrett said, thereby extending the range of products that can be fabricated successfully from this material, including clear film and small diameter tubing and rod.

In addition to the advantages usually associated with molded nylon products—impact strength; abrasion and solvent resistance; light weight; self-lubrication; high melting point—"Plaskon Nylon 8201" is characterized by its low moisture content, wide range of permissible stock temperatures (450-550 degrees Fahrenheit), and relatively high molten viscosity, according to Barrett.

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MAGNESIUM STEARATE USP, TGA Specs
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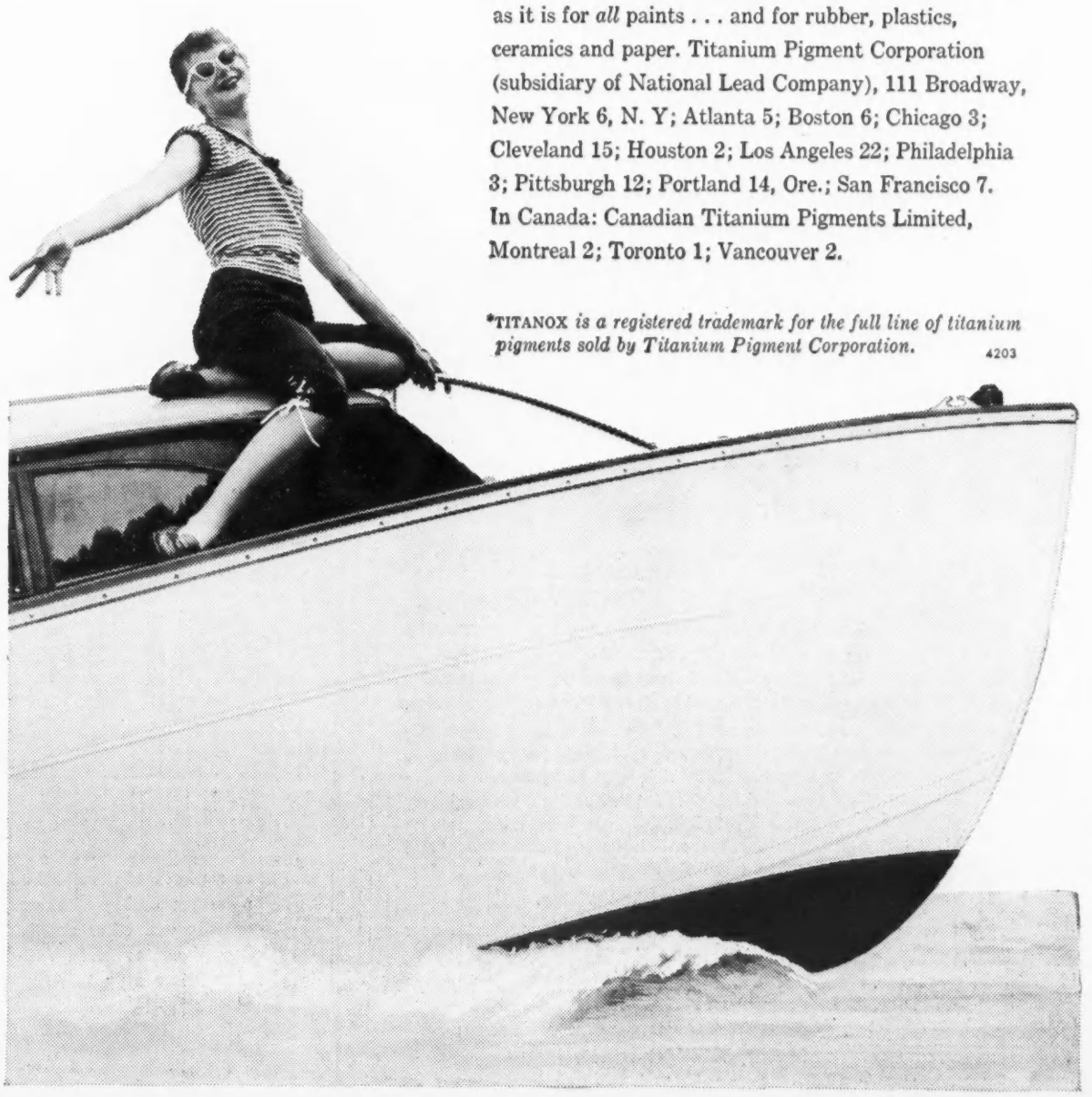

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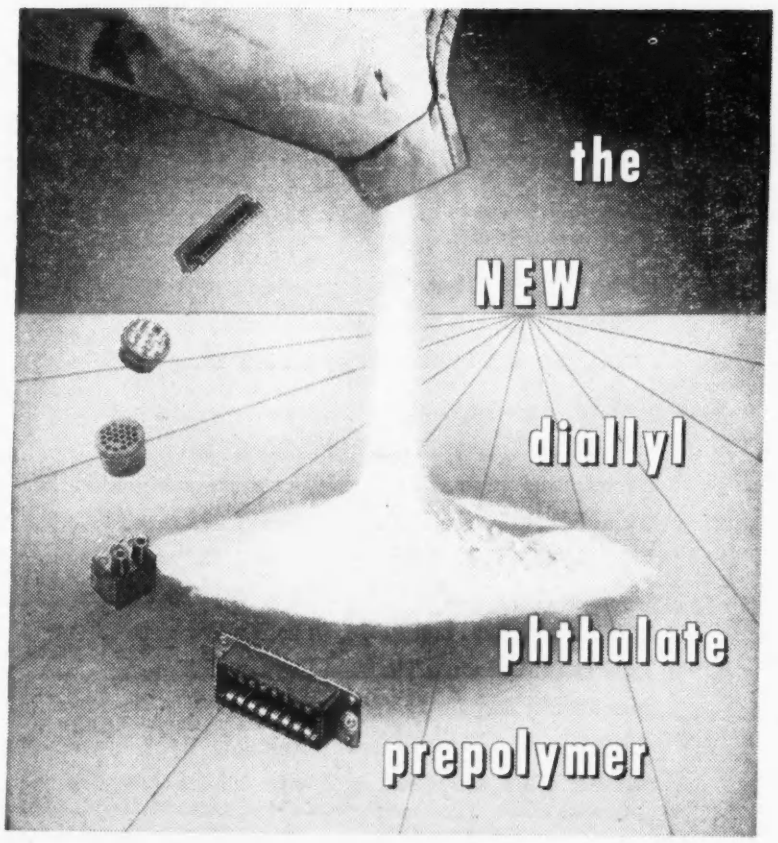

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resin

DAPON resin—a free flowing powder, *easy to handle, easy to store*—retaining all the excellent cured properties of diallyl phthalate

NOW articles can be made from diallyl phthalate, in the form of DAPON resin, which could not be made by direct polymerization of the monomer.

Molding compounds, impregnated textiles, resin blends containing DAPON resin have important applications. Products such as *decorative laminates; molded parts* for service under high humidity or corrosive conditions; *low pressure laminates* for structural or high frequency work are now being made with DAPON resin. In these applications the absence of volatiles, low shrinkage, excellent physical and electrical properties make DAPON resin the ideal choice.

DAPON resin is now commercially available.

For technical literature listing physical data, suggested uses and methods of handling write:

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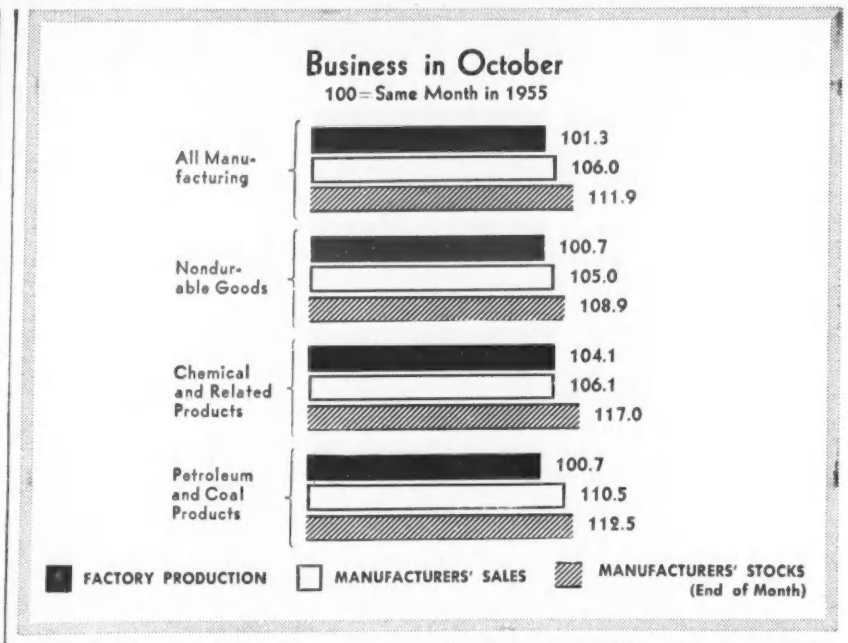
OHIO APEX fmc PLASTICIZERS ® CHEMICALS ®

OHIO-APEX DIVISION
FOOD MACHINERY AND CHEMICAL CORPORATION
NITRO, WEST VIRGINIA
Department 52



AIChE Names President, Officers for Coming Year

Dr. J. Henry Rushton, professor chemical engineering at Purdue University, has been elected 1957 president of the American Institute of Chemical Engineers, at the institute's 49th annual meeting at the Statler hotel, Boston.

At the same time, George E. Holbrook, assistant general manager of the organic chemical department of E. I. du Pont de Nemours & Co., Wilmington, Del., was elected vice-president.

John J. Healy, jr., Monsanto Chemical Company, Manson Benedict, Massachusetts Institute of Technology, Richard H. Wilhelm, Princeton University, and J. H. Koffolt, Ohio State University, were elected directors.

Pharmacy's Cooperation

—Continued from page 7

formation agencies now at work, he said, to end the "time of anonymity" for America's ethical drug manufacturers, and to make clear to the general public "just how the collaboration of manufacturer and wholesaler and physician and pharmacist has helped to lengthen the American life span almost a generation in the past fifty years."

The others, he said, are the Health News Institute, spearhead of the first serious effort to tell the story of the pharmaceutical industry and other members of the health team to the public, and Health Information Foundation, a research organization which studies various aspects of the nation's overall health picture and makes the results known in appropriate quarters.

In the past, the ethical drug manufacturer had "no reservoir of good will" into which to dip in times of crisis, Mr. Hardt declared.

Yet, "the scientific and industrial advances of the profession and the industry in recent years have not been brought about by men striving to be common but rather by men striving to distinguish themselves. So finally, after all the years of being only vaguely identified, if identified at all, in the public mind, we're taking measures to make ourselves known—and I for one am glad to see it happen," Mr. Hardt said.

Parenteral Drug Ass'n Re-Elects Graham Pres.

L. James Graham, of Burroughs-Wellcome & Co., has been re-elected president of the Parenteral Drug Association for 1957.

Other officers elected include: Vice-president, Dr. Harold Blumberg, Endo Laboratories, Inc.; regional vice-president, Harold Dembo, Chicago Pharmaceutical Company; secretary, Hubert E. Boyden, of William H. Rorer, Inc., and treasurer, Joseph W. Kouten, of Carroll Dunham Smith Pharmacal Company.

New directors elected for two-year terms were: William S. Bucke, Lafayette Pharmacal, Inc.; Raymond W. Barton, of Mead Johnson & Co., and Walter S. Konwiser, of C. F. Kirk Co.

Smith Chemical Named Agent

Smith Chemical & Color Company, Brooklyn, N. Y., has been named representative for Magnesiet- En Amaril-Fabriken, Vlaardingen, Holland, for the sale of various grades of magnesite including crude ore, unground calcined and ground calcined grades.

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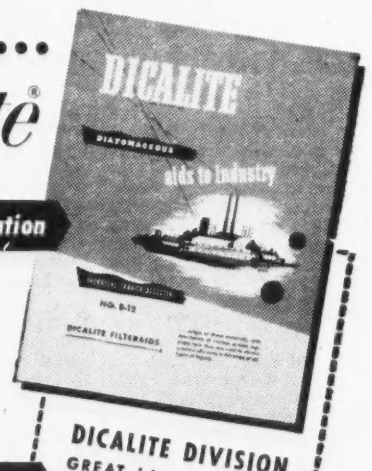

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Oils, Fats and Waxes

Trading was active for export last week, chiefly for cottonseed and soybean oils. This caused these oils to advance fractionally, but gains were not sustained when demand dried up. Domestic business was restricted to actual needs. Corn oil was stronger and up fractionally under light trading. Peanut oil was easy and lower. Crude coconut oil was steady and moved in moderate volume. Corpa was quiet and unchanged.

Tallow and greases continued unsettled due to slow export business because of the scarcity of steamer space. Offers were liberal at slightly lower prices. Soapers were in the market, but reduced bids. Oleo stearine was steady and advanced in some quarters. Oleo oil was firm and in limited supply.

Olive oil was stronger and limited stocks on spot were lifted 10 cents per gallon. Offers for shipment from all primary sources were unavailable. Palm oil on spot also was higher due to increased cost of replacements. Drums were in small supply and tankcar lots were withdrawn on spot. Lack of steamer space also affected business in crude menhaden oil for shipment. This market was firm, reflecting the strength of the European market. Refined fish oil was quiet, but firmly held at the advance. Cod oil was firmer and slightly higher for replacement. Linseed oil was inactive, with prices unsteady, reflecting the decline of the flaxseed market. Offers of tung oil increased and tankcars were available at concessions. Oiticica was quiet and quotably unchanged, but shadable on firm bids.

Quiet conditions prevailed in vegetable waxes last week. Tone of the carnauba market was steadier here due to stronger Brazilian market. Prices were without change but closely held for all grades. Crude beeswax continued high and nominal due to lack of trading for shipment from abroad. Offers for shipment continued scarce and held above the spot market.

PriceTrends

Advanced

Oil, cod, ⅛c. per lb.
Corn, crude, ⅛c. per lb.
refd., ⅛c. per lb.
Olive, 10c. per gal.
Palm, ¼c. per lb.
Rapeseed, ¼c. per lb.
Oleo stearine, ½c. per lb.

Reduced

Greases, ⅛c. per lb.
Linseed meal, exp., $1 per ton.
Cottonseed, crude, ⅛c. per lb.
refd., ⅛c. per lb.
Peanut, crude, ½c. per lb.
refd., ½c. per lb.
Tung, ¼c. per lb.
Tallow, ined., ⅛c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Dec. 16, 1955
119.16	119.85	120.76	103.76

For Current Prices see Page **9**

January 1 Price Advances

Oil, tall, crude, ½c. per lb.

Vegetable Oils

Castor—This market continued strong. Brazilian oil was scarce, with sales reported up to 22½c. per pound, tankcars, New York, prompt delivery. Offers from Brazil also continued scanty. Domestic grades were quiet, but firm at the recent advance.

Coconut—Trading in crude was noted at 11½c. per pound, tankcars, f.o.b. Pacific coast, prompt shipment with sellers asking 11⅝c. The New York market was quiet and unchanged at 13c., tankcars, prompt and later delivery.

Corn—Prices eased after sales were made at 14¾c. per pound, tankcars, f.o.b. mills and offered at 14⅝c. Refined oil was quoted at 18.21c. per pound, tankcars, New York, prompt.

Cottonseed—Futures were irregular last week, and reached new highs for this move under active export business, but gains were reduced when demand dwindled. This brought out considerable liquidation and quotations dropped sharply.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, December 14, follow:—

	Sales	High	Low	Close
		—Cents per pound—		
Dec.	191	16.42	16.02	16.05S
Jan.	27	16.35	15.95	16.05@16.11
Mar.	633	16.61	16.00	16.20S
May	554	16.67	16.05	16.24S
July	366	16.65	16.08	16.23S
Sept.	32	16.35	16.00	16.02@16.05
Oct.	18	16.05	15.78	15.83S
Dec. (1957)	36	15.80	15.50	15.50S

Total sales and switches, 1,861 contracts.

Algeria bought 650 tons of bleachable prime summer yellow for prompt and later shipment. December tenders increased to 188 contracts and stopped. Domestic business was limited. Refined salad oil closed lower at 17⅝c. per pound, tankcars, New York prompt delivery.

Crude cottonseed oil also lost early advances and scored net loss of ⅛c. per pound. Market closed nominal at 14c. tankcars in the southeast and Valley; 13⅝c., Lubbock and 14¼c., Waco.

Final estimate of the 1956 cotton crop was indicated at 13,303,000 bales by the Department of Agriculture, the smallest since the 1950 production of 10,014,000 bales. Production last year totaled 14,721,000 bales and 10-year (1945-54) average was 13,098,000 bales. The final estimate was well above the goal of 10,000,000 bales set by the government.

Linseed—Market was quiet and unchanged. Raw oil was held at 13.7c. per pound, tankcars, Minneapolis, December forward delivery. Demand was confined to actual needs. Withdrawals against former contracts moved in good volume.

Minneapolis.—Slow sales marked the linseed oil trade, users holding purchases to nearby requirements when contracts were exhausted. Quotations were unchanged, 13.7c. a pound, raw, in tankcars, f.o.b., Minneapolis; 14c., warehouse. However, bulk of meager new business was accomplished at concession of 2 10c. a pound. Shipping directions improved steadily and tankcar shortage plagued the crushers.

Shipments of linseed oil, in pounds, were as follows:

	1956-57	1955-56
Past week	7,260,000	5,820,000
Since Sept. 1	108,960,000	103,140,000

Flaxseed—Market was easier and declined 3c. per bushel. Seed offers continued light. Flaxseed crushed in November was reported at 3,109,382 bushels and totaled 9,392,217 bushels, August through November.

Minneapolis.—Crushers reduced bids on cash flaxseed 3c. a bushel to $3.40 spot and to arrive, basis Minneapolis. Offerings virtually disappeared after lower bids. Most crushers were able to fill nearby requirements ahead of the drop and were not pressing hard for new supplies. A few carlots were offered to-arrive at $3.47 to $3.50 but buyers were hesitant to raise bids for the time being at least. As of November 15 farmers placed about 12,000,000 bushels of this year's flaxseed under loan, compared to half that amount in 1955. Only three cars were offered in the spot cash market and no carlots were booked to-arrive the past week, only 1,000 bushels in oddlots. Arrivals of flaxseed for all accounts totaled 421 cars, compared with 233 cars a year ago. Shipments amounted to 46 cars, against 39 last year.

Receipts and shipments of flaxseed, in bushels, were as follows:

	Receipts		Shipments
	1956-57	1955-56	1956-57
Past week	824,800	407,750	82,800
Since Sept. 1	12,313,000	12,407,500	1,517,400

Oiticica—Trading was reported spotty. Tankcars were offered at 15½c. per pound, New York, prompt and later delivery. Drums were maintained at 17c. to 17½c. per pound, spot according to quantity.

Olive—With offers from primary sources nil combined with improved demand, stiffened the local market and quotations advanced 10c. per gallon. Spanish oil was in good request with trading reported at $3.50 to $3.60 per gallon, drums, spot duty paid, depending upon seller and quantity. Stocks on spot were smaller and closely held.

Palm—Higher cost of replacements lifted spot stocks ¼c. per pound. Drums on spot were advanced to 15¾c. to 16¾c. per pound, as to quantity. Tankcars were unavailable on spot and raised to 13½c. per pound, New York basis March delivery.

Peanut—Market was easy and lower. Crude was sold at 19c. per pound, tankcars, f.o.b. mills, prompt shipment. Re-

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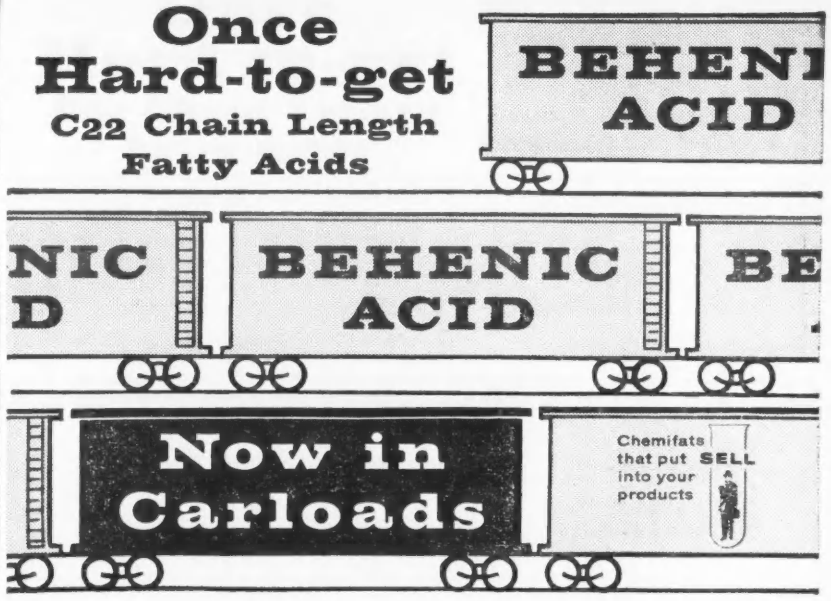

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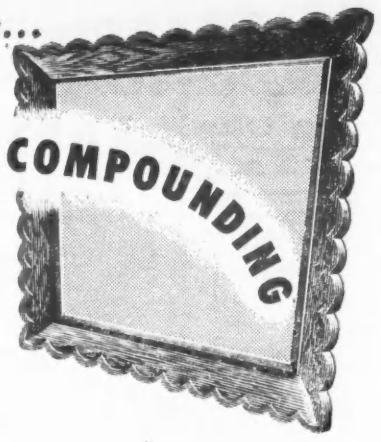

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Oils Fats and Waxes

fined oil was lower at 22½c. per pound, tankcars, New York, prompt shipment.

The Department of Agriculture has announced that peanut growers have approved the use of marketing quotas for the peanut crops to be produced in 1957, 1958 and 1959. In the unofficial tabulation of the votes in the December 11 referendum, 93.6 percent approved the continuation of quotas for another 3-year period. Approval of two-thirds or more of the growers voting was required for.

Rapeseed—Refined was firmer as a result of active demand from Europe. Tankcars were higher at 18¾c. per pound, tankcars, New York prompt and forward delivery.

Soybean—Active export business boosted prices fractionally, but the advance was not sustained. Italy was reported to have purchased about 55,000 metric tons of degummed for January-May shipment and Algeria, 2,226 tons. Crude was sold up to 14⅝c. per pound, tankcars, Decatur, December, but eased off to 14⅛c. asked. January was moved at 14¼c. and offered later at 13⅞c. and February was available at 13¾c., same basis. Refined salad oil was nominal at 16⅞c. per pound, tankcars, New York, prompt shipment.

Soybean Oil Futures

Sales and prices of crude soybean oil futures (new contract) in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, December 14, follow:—

	Sales	High	Low	Close
		—Cents per pound—		
Dec.	3	14.70	14.70	14.03 14.15
Mar.	17	13.58	13.39	13.30@13.40
May	6	13.20	12.83	13.06S
July	13	12.86	12.31	12.72S
Sept.	2	12.40	12.38	12.33@12.42

Total sales, 41 contracts.

Tall—Crude oil continued in tight supply and was firmer. Prices were lifted ½c. per pound, to $60 per ton, tankcars, f.o.b. works and $85 per ton, drums, carlots, effective January 1. Refined grades were unchanged and steady.

Tung—Quiet demand increased offers at lower levels. Tankcars were quoted at 23½c. per pound, tankcars, New York, prompt with some sellers asking ¼c. more. Drums were lower ranging from 25c. to 26c. per pound, depending upon quantity.

Miscellaneous

Castor Beans—This market was strong due active inquiry for European account. Offers for shipment were scarce and market was merely nominal around $175 to $180 per ton, f.o.b. Brazilian ports. Recent sales to Germany were reported on the basis of $197 per ton, c. and f.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Beans	Oil
Last week	322,350	794,000
Previous week	2,809,350	600,000
Corresponding week, 1955	402,000	650,000
Total this year	43,681,350	73,717,000
Corresponding period, 1955	76,321,160	47,523,000

Cocoa Butter—Buying interest lagged. Prices were held at 69c. to 72c. per pound, spot, according to quantity.

Copra—Trading was reported slow.

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Oils, Fats and Waxes

Shipments were unchanged at $160 per ton, c.i.f. Pacific coast.

Fats and Greases

Greases — Further weakness developed as a result of the lack of steamer space which has materially reduced export interest. Prices were fractionally lower. Yellow grease ranged from 7c. to 7⅛c. per pound, tankcars, delivered, with bids at ⅛c. less. Choice white all hog was easier with trading at 8½c., same basis.

Lard—There was little change in this market. Prices ruled steady with cash lard held at 14c. per pound, drums, Chicago.

Oleo Oil — Limited stocks kept this market steady. With stocks in tight supply, quotations were nominal around 19½c. to 20c. per pound, depending upon quantity and seller. Oleo stearine was steady with sellers asking from 14½c. to 15c. per pound, as to seller and quantity.

Tallow—Increased offers and slow demand unsettled this market. Quotations were off fractionally. Spain was in the market for 12,000 metric tons of extra and industrial fancy. Bleachable fancy was sold at 8c. per pound, tankcars, delivered, with bids at ⅛c. less. Prime was nominal at 7¾c.; special, 7⅜c., and No. 1, 7c., same basis. Edible tallow was maintained at 14c., same basis. Fancy was lower at 9½c., drums, f.a.s.

Tallow Futures

Sales and prices of bleachable tallow futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, December 14, follow:—

	Sales	High	Low	Close
		—Cents per pound—		
Dec.	3	8.13	8.05	8.05@8.15
Jan.	1	7.85	7.85	7.80@7.95
Mar.	1	7.80	7.80	7.65@7.80
May	1	7.85	7.85	7.80@7.85
July	1	7.85	7.85	7.85@7.90

Total sales, 7 contracts.

Cake and Meal

Cottonseed Meal — The market was steady with buying interests restricted to prompt requirements. Forty-one percent meal was quoted at $57.50 per ton, sacked, f.o.b. Memphis; $62 Alabama, Georgia and Carolinas for December-January shipment.

Linseed Meal—Keen competition and quiet demand kept market easy. Prices were unchanged.

Minneapolis.—Competition from relatively cheaper soybean meal resulted in continuation of weak linseed market, although prices were quoted unchanged. Crushers quoted 36 percent extracted linseed meal at $51 a ton for December forward shipment. Some re-sale offerings were reported available at $1 less. Withdrawals against existing contracts continued at an excellent pace. Expeller meal, 32 percent protein, was $1 cheaper for nearby, quoted at $60.50 for December March, and offerings were more plentiful than in recent weeks.

Shipments of linseed meal, in pounds, were as follows:

	1956-57	1955-56
Past week	16,260,000	16,500,000
Since Sept. 1	227,820,000	262,081,000

Peanut Meal—Trading was light and confined to the Texas area on the basis of $58 per ton, sacked, f.o.b. shipping points. Market in Georgia was merely nominal at $60 per ton, sacked, mills.

Soybean Meal—Business was fairly active chiefly for immediate requirements. Forty-four percent meal held steady at $46.50 per ton, bulk, unrestricted f.o.b., Decatur, December-March shipment; $48 April-September and $50-$51 per ton f.o.b. Mississippi Valley points, December-February.

Waxes

Carnauba—Local market was steadier with the higher cost of replacements from Brazil. Prices for spot material were unchanged, but firmer, with less price shading prevalent due the stronger primary market. Consuming demand was reported moderate for actual needs and delivery after the first of next year. No. 3, Ceara crude was held at 66c. to 68c. per pound, spot, as to quantity with Parnahyba 2c. higher. Refined grades were unchanged and well held. Yellows were scarce and strong. No. 1 Ceara yellow was maintained at $1.43 to $1.45 spot and Parnahyba, 3c. more. Trading in yellows for shipment was reported on the basis of one part yellow to 3 parts fatty grades.

Japan—Demand continued slow. Light stocks on spot ranged from 47c. to 49c. per pound, depending upon quantity and seller.

Salk Vaccine Export Quota Is 7 Million Cubic Centimeters

An export quota of 7 million cubic centimeters has been established for poliomyelitis (Salk) vaccine for the first quarter of 1957, Bureau of Foreign Commerce has announced.

The quota is the same as that set for the previous quarter, but over 6 times the 1.5 million cc's licensed for export in the third quarter of 1956.

BFC said the first-quarter quota will be licensed according to criteria already in effect, which gives priority to those countries most urgently in need of the vaccine, and which maintain adequate immunization programs.

Aikman (London) Names Two Managing Directors

Aikman (London), Ltd., London, England, has appointed P. Y. Hsu a managing director. Mr. Hsu for the past year has been general manager.

Barry T. Aikman, who has been a director since 1951, has also been appointed as a managing director of the company, beginning January 1.

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Oils Purchasing By Italy To Get USDA Financing

The Department of Agriculture last week agreed to finance the purchase by Italy of $20,547,000 of cottonseed oil or soybean oil from United States suppliers. Authorization No. 20-09, issued under an agreement with Italy announced on October 30, provides for purchase of approximately 58,500 metric tons of the oil.

The oil to be covered by the financing is to be procured on or after December 10, 1956, and on or before May 31, 1957, and shipped from United States ports on or after December 10 and on or before June 29, 1957.

Inquiries containing the transaction should be addressed to Italian Technical Delegation, 2401 15th street, N. W., Washington, D. C.

Cutter Laboratories Names Two to Executive Positions

William R. Thomas, Controller of Cutter Laboratories, Berkeley, Calif., has been appointed director of finance in charge of all company financial activities by the board of directors.

In another appointment by the Cutter board, Stephen B. Fiske, treasurer, was also appointed secretary of the company.

Esso Standard Appoints

Appointment of R. A. Appleman as general traffic manager of Esso Standard Oil Company, New York, has been announced. An employee of Esso Standard since 1919, he has been associated with the company's transportation and distribution operations throughout his Esso career.

Calcium Chloride, Ammonia Buying Authorized by ICA

International Cooperation Administration last week issued a $50,000 purchase authorization to Korea to purchase calcium chloride and anhydrous ammonia. Purchases will be made from world sources under PA No. 89-390-99-H9-7203, with final delivery not later than November 30, 1957.

ICA also issued an authorization to Thailand to purchase $600,000 of chemicals and chemical preparations from world sources under PA No. 93-390-99-A6-7205 with final delivery not later than October 31, 1957.

Drug Men Are Named By Academy of Sciences

The New York Academy of Sciences has elected Hilary Koprowski, of Lederle Laboratories, Pearl River, N. Y., as vice-president. Frederick C. Nachod, of Sterling - Winthrop Research Institute, Rensselaer, N. Y., has been named corresponding secretary.

George H. Mangun, of Warner-Chilcott Laboratories, Morris Plains, N. Y., has been named a councilor of the academy, to serve for 1957-59.

Acetostearine Films Show Promise in Tests by USDA

Films of acetostearine products show good resistance to permeation by three of the most common atmospheric gases, carbon dioxide, oxygen, and nitrogen, according to a report of experiments published recently by N. V. Lovegren and R. O. Feuge, of the southern utilization research branch of the agricultural research service of the Department of Agriculture.

The acetostearines are modified fats which can be formed into nongreasy, waxlike films, believed to have excellent possibilities as food coatings. The only obstacle to commercial use for this purpose appears to be a lack of sufficient proof of edibility.

Preliminary results of investigations by several groups indicate that these compounds are utilized in the same way as ordinary triglycerides containing the same long-chain fatty acids.

In the tests conducted at the southern utilization research branch the acetostearines were compared with various organic films. Ethylcellulose, polystyrene, and an ethylene polymer were found to be more permeable to both oxygen and nitrogen than are the films of acetostearine.

Polyethylene has approximately the same permeability to these gases, while cellulose acetate, regenerated cellulose, and nylon have a lower permeability.

Permeability of acetostearines to carbon dioxide was found to be less than that reported by other investigators for ethylcellulose, and approximately the same as that for polystyrene and polyethylene. Nylon and regenerated cellulose have lower permeabilities to carbon dioxide.

Surplus Stocks of the CCC Detailed by Agriculture Dept.

Surplus stocks of the Commodity Credit Corporation being offered for sale during December include nonfat dry milk, peanuts, grain sorghums, gum rosin and gum turpentine, the Department of Agriculture announced last week.

The only major change in this list this month was the adoption of a method of determining minimum domestic sales prices for flat-stored lots of grain sorghums which reflects the additional costs to CCC in handling such lots.

Air Reduction Sales Buys Assets of Jackson Products

J. H. Humberstone, president of Air Reduction Sales Company, New York, a division of Air Reduction Company, has announced the company's acquisition of the assets and business of Jackson Products, Inc., Detroit, Mich.

Jackson manufactures welding electrode holders, welding helmets, safety goggles, and other welding supplies for the electric arcwelding field.

Essential Oil Parley Jan. 4

The Essential Oil Association will hold its annual meeting and dinner January 4 at the Savoy Plaza hotel, New York.

Biphenyl Compounds Called Effective Reactor Coolants

Low-cost electric power from atomic energy appeared closer to reality last week with the disclosure that biphenyl compounds may be the means to low-pressure cooling and moderating systems in nuclear reactors, permitting simpler and cheaper installations.

Malcolm McEwen, a research scientist for Monsanto Chemical Company, at Dayton, Ohio, told a meeting of the American Institute of Chemical Engineers at the Statler hotel, Boston, that preliminary engineering studies fully justify the construction of experimental organic-cooled reactors.

The first such reactor is now being built for the Atomic Energy Commission by Atomics International, a division of North American Aviation, Inc., at the National Reactor Testing Station, Arco, Ida., for completion early in 1957.

Two of the major problems in nuclear reactor design are the removal of the tremendous heat which builds up in its core and the need to "moderate" or slow down high-speed neutrons there to insure continuing fission, Mr. McEwen said.

Monoisopropylbiphenyl and biphenyl, of the compounds tested, showed the most significant advantages as potential coolant-moderators for reactors, according to Monsanto's data. Their low vapor pressure indicates their ability to function efficiently in a low-pressure system.

Radiation damage to the compounds was substantial, Mr. McEwen said, but the decomposition products were found to be easily separable from the system by simple distillation. They created no problems of heat transfer in the system at concentrations of as much as 10 percent.

Copper Export Quotas Raised by 3,000 Tons

Bureau of Foreign Commerce has announced that the limit on exports of new and old copper scrap is being raised from 9,000 short tons to 12,000 short tons for the first quarter of 1957.

The quota for new and old copper-base alloy scrap, except copper-nickel alloy scrap containing five percent or more nickel, is to remain unchanged at 21,400 short tons.

Copper-base alloy ingots and other crude forms, formerly under quantitative export restrictions, now are open-ended, and exporters no longer are required to identify the foreign consumer on their applications to export this material. BFC said this relaxation could be made because of improved domestic supply.

As in previous quarters, copper-nickel alloy scrap containing 40 percent or more copper and 5 percent or more nickel will not be approved for export.

All other exports of copper raw materials, including offshore copper scrap and copper-base alloy scrap, remain under open-end licensing. In addition, exporters no longer are required to certify on their applications to export offshore scrap that these materials were collected under the terms of a US Government collection contract.

They must, however, continue to certify that the scrap originated in, and will be exported from, a US territory or possession.

Agar Program Reviewed Bv BDSA Task Group

The government's program for stockpiling agar was reviewed last week by a task group of industry and government experts called into conference by the Business and Defense Services Administration.

Purchase specifications for the bacteriological grade material were revised by the group to bring them into compliance with the requirements for this grade as prepared by the Society of American Bacteriologists.

The agar currently in the stockpile was purchased, for the most part, a number of years ago and there is some uncertainty whether it can all meet the standards for bacteriological grade agar. It is believed that much of the agar is of the lower USP grade material.

Selenium Foreign Shipments To Be Boosted in 1957

An export quota of 10,000 pounds (selenium content) has been established for selenium in the first quarter of 1957, it has been announced by the Bureau of Foreign Commerce. This compared with a quota of 6,000 set in previous quarters.

The quota applies to the following commodities; selenium powder, metal; selenous acid; ferroselenium; and selenium-containing chemical compounds, including pigments.

Applications submtited against the first-quarter quota for selenium must be submitted during the period December 3-17.

Narcotic Drugs Sellers Must File Inventory Data

Bureau of Narcotics last week reminded manufacturers and wholesalers of taxable narcotic drugs that the annual report on inventories of narcotic stocks on hand at the close of business on December 31 must be filed.

Manufacturers will use the latest revision of form 810e, dated September, 1946, for Class I stocks, and wholesalers will use the latest available revision of form 811c, for their Class II stocks.

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3—Devine double door Vacuum Shelf 17 and 20—59"x78" shelves.
3—Stokes Rotary Vac 4'x20', 30"x8', 18"x42".
1—Devine Rotating Vacuum 5'x10'.
2—Louisville Rotary Steam Tube 38"x25', 6'x40'.
3—Rotary Dryers 4½'x50', 6'x40', 6'x60'.

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2—Baker Perkins 100 and 50 gal., 316 S.S.. Sigma Blades.
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1—Struthers-Wells 6'x9', 304 S.S. Rotating, jacketed.
1—Robinson 48"x7'6" long, 304 S.S. jacketed Powder, 90 cu. ft.
1—4' dia., 304 S.S. Conical Blender, 3 HP motor.

MILLS

1—Patterson NEW 6'x8' Porcelain lined Mill 50 HP motor.
3—Abbe Paterson 6'x8' unlined Ball Mills.
3—Abbe 5'x6', 4'x5', 3'x3½' Silex lined Pebble Mills.
3—Mikro Pulverizer Bantam and #2TH.
1—National 6"x12" Two-Roll Mill, motor driven.
7—Jeffrey Hammermills 20"x12", 15"x8", motor driven, NEW.

CENTRIFUGES

2—Sharples C-27, C-20 Super-D-Hydrators 316 S.S.
1—Sharples PY-14 Super-D-Canter, 304 S.S.
5—Bird 32"x50". 316 S.S. solid bowl, continuous, fume tight, 60 HP TEFC motors, New 1953.
2—Bird 18"x28", 24"x38" Stainless Steel, Continuous, Solid Bowl.
2—Tolhurst 40" Suspended Steel Perforated 15 HP XP motors.
1—Bird 40" Suspended rubber covered, imperforate basket.
2—Bird 40" Suspended 347 S.S. perforated basket, TEFC motor.
1—AT&M 36" center-slung, rubber covered, perforated basket.
1—Fletcher 30" center slung 304 S.S., Perforated basket.

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1—Oliver 5'3"x8' Steel Rotary Vacuum, totally enclosed.
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6—Robinson, Sprout Waldron, 304 S.S. Sifter, 40"x84" single deck.
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2—Lawrence T316 St. St. Sump Pumps, 5" x 4", 200 GPM.

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CRUSHERS, JAW, 20x4 Farrel, 12x26 Champion, 14x28 Acme, 15x24 Traylor.

ROTARY DRYERS—3'x20', 39"x21', 44"x25', 5'x40', 6'x40' Reducer drive.

BRIQUETTING MACHINE — Komarek Greaves—16"x10" w mixer & drive.

FORK LIFT—2000# Hyster gas pneumatics, 17' lift.

FILTER PRESSES—Shriver 7" lead w lead diaphragm pump & 12"x12" p&f CI.

MIXERS—1 & 30 cu. ft. double cone, 5 & 9 cu. ft. Lancaster, EBG 3 & 4.

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3870 M1 Bird Continuous Conical Centrifugal; 28"x18".

4305 P2 Bird Cont. Solid Bowl Centr. Filter; 36"x50"; with Plow.

1152 M Bird 48" Rubber Covered Extractor; 40 HP 2 Sp. Motor.

4041 P 14 Rubber Cov. Susp. Centrifugal; 30"x18"; Annular Dis.

4093 B11 A. T. & M. Susp. Centrifugal; 40"x24"; Solid Bowl.

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FILTER, Niagara 35-20, Vert. S.S. Leaves
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1—Stokes "DD-2" Rotary Tablet Machine.
2—Devine #28 Double Door Vacuum Shelf Dryers.
2—#12 Sweetland Filters, 36 monel leaves on 4" centers.
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1—Steel jack. Kettle 1000 gals.
3—Day & Ross 15-50 gal. Pony Mixers.
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1—Day 5 x 12 Lab. Roller Mill.
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Houchin 18"x30" 4 Roll Granite Stone Mills.
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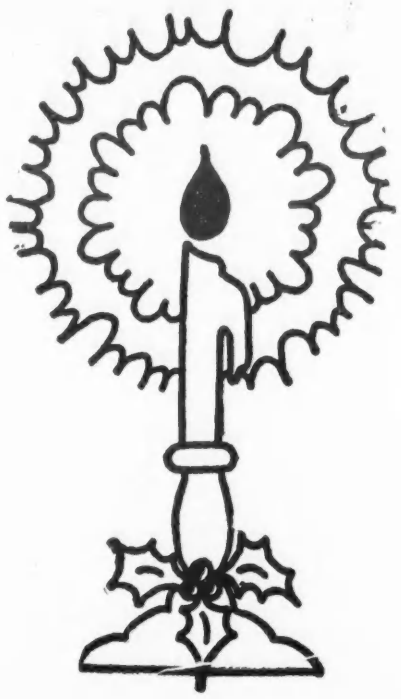

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1—Raymond 3" Hammer Mill, like new.
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1—1000 gallon horizontal closed tank.

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18" Gayco Cent. Separators.
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1300 gal. Glass-Lined Tank.
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For Sale: 93 sq. ft. S.S. T304 Heat Exchanger ASME; 110 gal. Robinson S.S. unique semi-mass Mixer jacketed ASME; 75 gal. S.S. jacketed Day double sigma blade Mixers; 700 gal. S.S. T304 sanitary Tanks; 24" x 36", 42" x 90", 42" x 100", double drum Dryers; S.S. T304 sanitary double effect Evaporator, 1025 sq. ft. Best Equipment Company, 617 Davis Street, Evanston, Illinois. DAvis 8-0926. Note: after December 15, 1956, our new address will be 1737 West Howard Street, Chicago 26, Illinois.

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Salesman Wanted: to sell high analysis granular complete fertilizers in mid-South region. Agricultural background preferred, successful fertilizer sales experience essential. State training, experience, give references. Write OPD 214.

Progressive New Jersey chemical manufacturer seeks salesman for selling industrial chemicals in eastern area. Splendid opportunity to advance. Write resume of experience, age and salary dsired to OPD 197. Replies confidential.

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Armour Labs Appoints

Eldon D. Nielson has been appointed head of the biochemistry department of Armour Laboratories, Kankakee, Ill.

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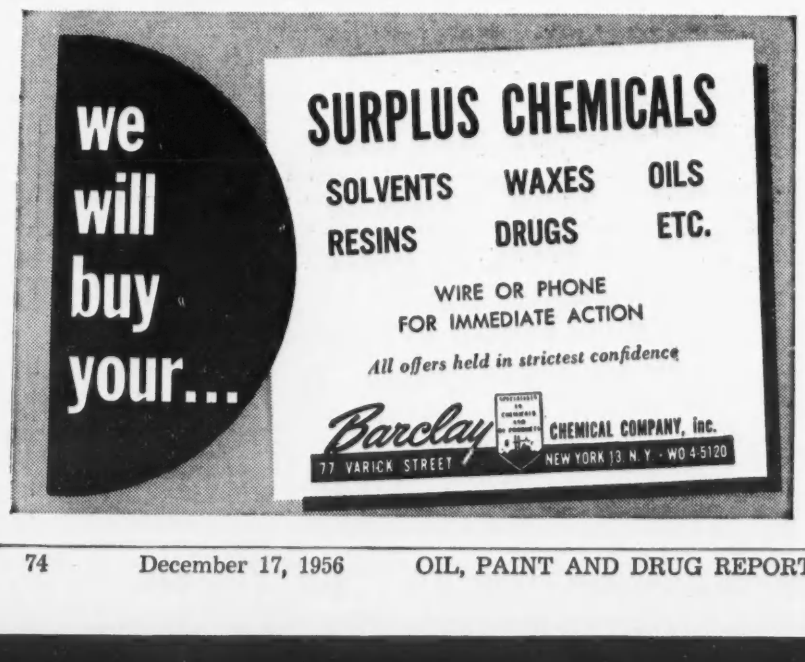

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American Potash Realigns Eastern Sales Department

A realignment of the eastern sales department of American Potash & Chemical Corporation, Los Angeles, into two operating groups has been announced by William J. F. Francis, vice-president in charge of sales.

Under the new arrangement the department will operate as a heavy chemicals division and an industrial chemicals division. Ed M. Kolb has been named general sales manager of the heavy chemicals division, while Dr. Al J. Dirksen, formerly director of AP&CC's market development department, has been appointed general sales manager of the industrial chemicals division. Their headquarters will remain at the company's eastern general sales office in New York.

William M. Clines, formerly western sales manager, has been named western general sales manager to handle all company sales in the western area. Mr. Clines will continue to headquarter at AP&CC's executive offices at Los Angeles.

The heavy chemicals division will be responsible for AP&CC's eastern sales activities in borax, potash and sodium sulfate, as well as the administration of the company's export department and the British subsidiary, Borax & Chemicals, Ltd.

The Industrial Chemicals Division will handle company eastern sales for lithium, boron, "Tronacarb," electrochemicals such as chlorates, perchlorates and manganese dioxide, as well as all new product marketing.

Narcotics Bureau Rules On Papaverine, Noscapine

Bureau of Narcotics last week ruled that either papavarine or noscapine is permissible in exempt preparations in quantities not exceeding two grains per avoirdupois or fluid ounce of the preparation.

To entitle a papaverine or noscapine preparation to an exempt status other, non-narcotic, medicinal ingredients must be present in therapeutic quantity; all sales must be for bona fide medical purposes; the proper records must be kept; and the full requirements of the law and regulations relating to exempt narcotic preparations must be observed.

APMA Told More

—Continued from page 5

our million or so epileptics are receiving modern therapy."

He also asserted that the failure of doctors to continue to report fatalities from the use of the drugs makes it impossible to advise patients accurately about the risk of treatment.

He said there are now approximately 400,000 children under the age of twenty who are epileptic. "Suppose as a result of experienced use of present-day treatment," he added, "one in ten of these becomes self-supporting throughout adult life, instead of being a financial liability to relatives or the state.

"The difference between these two conditions might be at least $2,500 a year for forty years. The cumulative saving for children now living would be two billions of dollars."

Dr. Lennox also urged support of a Brain Research Foundation through "the pooling of the best pharmaceutical, chemical, and neurological brains in an alliance of business and medicine." He said study of the human brain has lagged behind the study of other less important organs.

"The inaccessibility and complexity of the brain has awed the physician; the sad consequence of any defunction has frightened the people. Freudianism and mutilating brain operations have not filled the therapeutic void."

Dr. Lennox told APMA that electroencephalography has made "that most wonderful of all God's creations, the human brain, open, like a book for study. If the heart, lungs, or joints fail, the individual suffers; but if the brain is disordered, the whole community or even the world may be in turmoil. And yet, brain study, in relation to the investigations of other organs, is sadly neglected."

Dr. Lennox was presented with APMA's 1956 scientific award in recognition of his research and use of drugs in the fight against epilepsy.

A past president of the International League Against Epilepsy and founder and past president of the national chapter, Dr. Lennox has been associated with the Children's Medical Center in Boston for the past fifteen years.

Nickel Policy

—Continued from page 4

should, meanwhile, study shifting defense needs to ascertain the feasibility of diverting additional quantities of nickel to the civilian market "wherever and whenever possible."

- There are patent inconsistencies, confusions, and conflicts in the systems of allocations now in use within the electroplating industry. The systems are obsolete and self-defeating. They should either be correlated as between primary producers and the plating suppliers, or scrapped in favor of an allocation system related to the present plating capacity of electroplaters.
- Abuses of the defense-rating system on nickel should be stamped out wherever found, and violators of existing regulations should be prosecuted vigorously. Here again the Department of Commerce has exhibited a peculiar lack of ability to act; and, accordingly, the committee recommends that the responsibility for both the investigation and the prosecution of violations be turned over immediately to the Department of Justice.

Solvay Is Testing

—Continued from page 5

program at Brunswick. Liquid caustic soda (50 percent NaOH) will be available in both regular and rayon grades. While no dry forms of caustic soda are presently planned. 70-74 percent liquid will be available, it was said, with completion of the second step in the autumn of next year.

Liquid chlorine will be shipped in standard single unit tank cars of sixteen-, thirty- and fifty-five-ton capacity.

Served by the Southern and Atlantic Coast Line railroads, the Solvay plant will also ship caustic soda by barge to consumers in the southeast.

In addition to its Brunswick plant, Solvay has chlorine-caustic soda facilities at Syracuse, N. Y., Baton Rouge, La., and Moundsville, W. Va.

Pan American Sulfur Yield

—Continued from page 5

the largest producer in Mexico, expects to ship in excess of 400,000 tons of sulfur this year to customers all over the world. Production next year, it is estimated, will top 700,000 tons from the firm's 23,300-acre concession on the Isthmus of Tehuantepec in southern Mexico.

Pan American started pilot production in September, 1954, with full scale operations getting under way in May, 1955. Originally the plant was capable of heating 3.3 million gallons of water daily, but with the expansion program now completed, the plant's capacity is increased to more than 5 million gallons daily. With the additional water, the plant is capable of producing in excess of a million tons of sulfur per year.

Pharmacists to Hear

—Continued from page 7

Body Odors" will be the topic of Dr. Marion B. Sulzberger and Dr. Franz Herrmann, of New York University-Bellevue Medical Center.

Dr. Aaron B. Lerner, of Yale University, will speak on "The Present Status of Pigment Forming Drugs."

"Toxicity Problems of Cosmetics" will be discussed by Dr. Bernard E. Conley, of AMA.

The discussion group will include Drs. Howard T. Behrman, Irvin H. Blank, Carl T. Nelson, and Stephen Rothman.

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Aluminum Soap, Ingot Export Allotment Raised

A quota of 5,000 short tons has been set for exports of new and old aluminum scrap and remelt ingots for the first quarter of 1957 by the Bureau of Foreign Commerce. This is 1,000 tons higher than the 4,000 ton allotment for the fourth quarter of this year.

Primary and secondary aluminum metal and alloys in crude form continue under open-end licensing. This means that no quantitative quota has been set, but exports will be controlled to protect the national security.

Special licensing provisions, established in previous quarters, remain in effect. Under these provisions, applications to export primary and secondary aluminum metal and alloys in crude form must be accompanied by evidence of availability.

Leaded aluminum foil scrap will not be charged against the first-quarter quota when such applications are accompanied by evidence that the foil is unsalable in the United States.

In addition, scrap containing 70 percent or less aluminum will be charged against the first-quarter quota only on the basis of the net weight of the aluminum alloy. Exporters, therefore, are required to specify the weight of the aluminum alloy content on their applications to export this material.

Bakelite Names Manager

Appointment of H. F. Robertson as manager of technical planning has been announced by Bakelite Company, New York, division of Union Carbide and Carbon Corporation. In this position, Mr. Robertson will be concerned primarily with future and long-range technological effort of the research and the product and process development groups.

the
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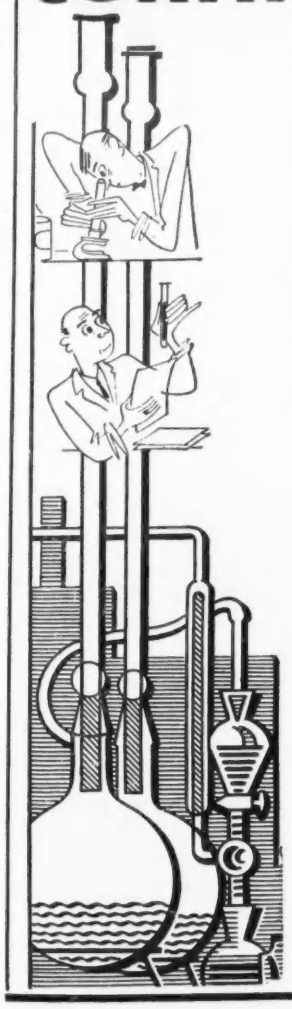

Some reports from our Coatings Section might well be forwarded to the client with a notation—"Too Late". These are reports of salvage operations, of advice sought too late, of harm repaired but not foreseen.

Our suggestion is that the consultant be called upon not too late, but at the beginning; not to repair but to prevent. We offer to users and makers of coatings, the services of qualified scientists and paint technologists.

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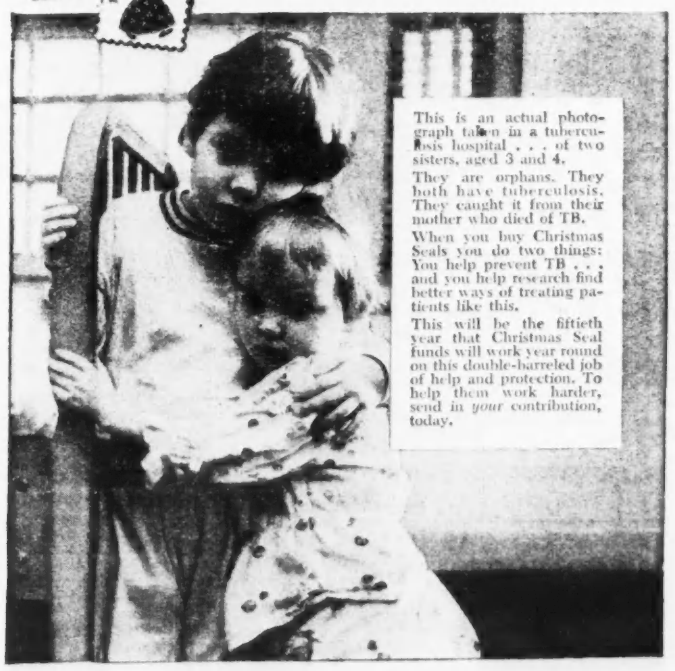

This is an actual photograph taken in a tuberculosis hospital . . . of two sisters, aged 3 and 4.

They are orphans. They both have tuberculosis. They caught it from their mother who died of TB.

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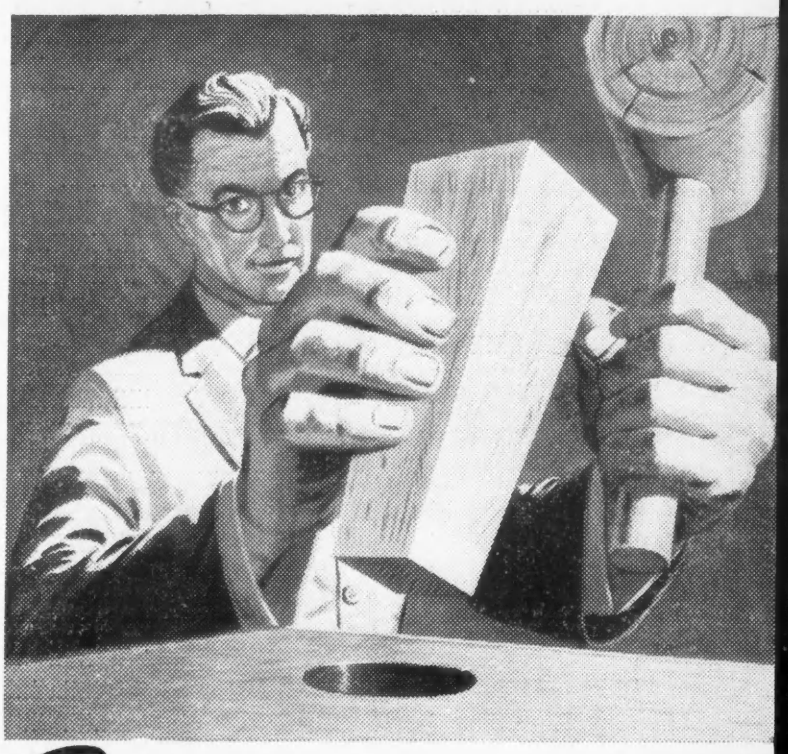

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